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Patterns of economic continuity and change in early Hafsid Ifrîqîya

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Patterns of Economic Continuity and Change in Early Hafsid Ifrîqîya

A dissertation submitted in partial satisfaction of the requirements for the degree Doctor of Philosophy in History

by

Patricia Kozlik Kabra

1994

The dissertation of Patricia Kozlik Kabra is approved.

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Al-Iṣṭibâr miftâḥ al-faraj

For those who have gone
before, and those who will come
after.

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ACKNOWLEDGMENTS

"I had always thought that doubting was a scientific duty, but now I came to distrust the very masters who had taught me to doubt." (Umberto Eco, Foucault's Pendulum)

The table was set with coffee, croissants, bread, and cheese. The town of Sidi Bou Said, Tunisia, had long since heard the cock crow, swept the streets, and gone to prayer. The sun glinted off pristine white blocks of houses, gilded with sky blue trim and shuttered balconies, and twined with bouganvilla. The terrace commanded a view that stretched to Tunis and the sea. As I sat, commencing my studies, another view and terrace were the setting for the last public appearance of Fernand Braudel, October 20, 1985 at Chateauvallou, France. There among his many "élèves" and distinguished scholars, the themes of his life's work were discussed and he was honored.

"He was honored." The words ring with the acclaim of a lifetime of historical research and study, and the memory, as well, of all those of his generation whose lives were cut short by the "Great War." Among these was Henri Bloch, whose influential book, The Historians Craft, was written while he was interned in a Nazi concentration

camp - but, it was never completed before his death under torture. Their vision and scholarship has served as an encouragement to me through all the phases of this dissertation.

So, it is with the recognition of the simultaneity of beginnings and ends that I would like to dedicate this dissertation to two great historians, Braudel and Bloch, and to the tradition of "doubting" which my doctoral Chair, Professor Michael Morony, trained me in so well. To him, I give my thanks and appreciation for his patience and criticism. I also would like to thank another member of my committee, Father Robert Burns, for his training in the use of archival material, without which I would never have been able to complete this dissertation. To Professor Irene Bierman, I give a special thanks for opening my eyes to the architecture of the Hafsids, and for giving me the opportunity to go and study it more on a Dickson grant. Professor Ismail Poonawala is to be especially thanked for his training in medieval Arabic texts, the study of which were essential in this dissertation. And to Professor May Seikaly, whose office and home were always open to me, I give my thanks for perusing my manuscript and offering her friendship.

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VITA

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ABSTRACT OF THE DISSERTATION

Patterns
of Economic Continuity and Change
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by

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Professor Michael Morony, Chair

It is argued here that the early Hafsid period marked the end of a long pattern of economic development in Ifrîqîya which had been dominated by the production of agricultural surpluses for sale in the region, and by the control of Saharan trade. By the thirteenth century agricultural production had been reduced to the point that famines occurred frequently in the Hafsid territories, despite a population reduced by plague and warfare. Saharan trade, with its gold and slaves, was only intermittently passing through centers under Hafsid control. It was the deterioration of the traditional economic base which made the Hafsids dependent on foreign

merchants, and governments to bring commerce and profits to their territory.

Through the investigation of legal texts, chronicles, biographies, and archaeological data, the changes and continuities in the economy of Ifrîqîya from Antiquity to the Hafsid period become apparent. It is evident that the Hafsids inherited an economic and political system which had passed through a century of disorder due to the fighting between the Muwahhidûn, and the Murabit, Ibn Ghâniya; as well as the invasion of the Normans under Roger II. However, the Hafsid government was responsible, as well, for undermining the economy. Their policy of granting iqta' to Arab tribes, spending lavishly on the capital, and neglecting the fertile Sahil region contributed to uprisings, monetary crises, and famines. They also had the misfortune to rule during the epidemics of the fourteenth century, the Black Death being the most famous, which reduced the population by at least one third. Thus, the Hafsids were both the recipients of a declining economic base, and the harbingers of a new order in the Maghrib, one in which increasingly fragmented states struggled to retain their power against the steady pressure of European, and later Ottoman hegemony.

INTRODUCTION

"The Maghrib was mentioned once in the presence of the Commander of the Faithful, Ibn ʿAbd al-ʿAzîz al-ʿUbaydî. One of those present said, 'We have been told that the world has been likened to a bird. The Orient is its head, the Yemen is one of its wings and Syria is the other. Iraq is its chest and the Maghrib is its tail.' Now in the assembled gathering there was a man from the Maghrib named al-Duqâ. He said to them, 'You have spoken the truth. The bird is a peacock!'"

Kitâb mafâkhir al-Barbar[1]

The jewelled tail of the peacock, much more impressive than its homely body, startles and amazes the viewer. So too does the medieval Maghrib never cease to astonish the scholar with its array of ʿulamâʾ, sufis, saints, merchants and amîrs. However, the jewels and erudition were purchased with much more mundane items: wheat, oil, and cloth. At the center of this production, from Antiquity through the Islamic era, was Ifrîqîya, stretching from Barqa to Bijâya. Under the Phoenicians, Romans, Byzantines, Arabs, and Berbers, Ifrîqîya played a leading role in, first, the commerce of the Mediterranean,

and later that of the Sahara as well. It was a role achieved largely due to the production of an agricultural surplus, and its geographic position on the shore-hugging shipping routes of the Mediterranean. This position reached an apex and nadir in the period of Hafsid hegemony in Tunis. The question is, in what ways did this dominance in agricultural production and trade develop and change by the Hafsid period? The answer to this question requires both an investigation of the economy under the Hafsids, as well as that before. And, it requires a discussion of the possible methods and theories that can be employed to do so. In essence, this is both a study of continuity and change, as well as an economic history of Ifrîqîya.

The Question of Continuity

The history of the Maghrib has been compartmentalized into periods marked by empires and dynasties; but the people and the land have not changed so completely or rapidly as the rulers. It is this past, with its trends and continuities over space and time, which forms the foundation and scaffold for any study of the Hafsid period. However, the question of continuity, "invariance in the midst of variation"[2], and the search for patterns and trends, raises theoretical problems which must be considered before an economic study can be undertaken.

The concept of continuity is an artificial construct. First, there is the assumption that there is such a thing as continuity because links in linear time necessarily mean that events or conditions which come before and after a given point are causally linked. Second, it is the historian who decides what, how, and where to link, not the events themselves. In traditional narrative history, events, mostly political, have been strung together in a causal chain along with an explanation. The linkage is assumed to be objectively dictated by the "facts" and the interpretation subject to revision. The objectivity of narrative history, however, has been doubted by historians themselves who well know how often data has been left out or included on the whim of an individual scholar, or the power which the choice of an adjective may have.[3] Postmodernist theorists have pointed to the historical narrative as a "text" which also is part of History and must be "deconstructed" or taken apart in order to show the viewer as part of the viewed. The historian thus becomes both outside and within the text. Thus it is the historian who creates continuity or discontinuity.

The problem of continuity is discussed by Alexander Gerschenkron in his article "On the Concept of Continuity in History."[4] "It is the historian who, by abstracting from differences and by concentrating on similarities, establishes the continuity of events across decades or

centuries... decides how far back the causal chain should be pursued... And it is the historian's own model in terms of which changes in the rate of historical change are defined."[5] In other words, the historian is creating a model through which he makes comparisons over time, just as a mathematician creates a model/equation which determines the rate and interval of changes in series of numbers. However, it is not simple to quantify historical change, in fact, it is usually impossible. So, Gerschenkron suggests five possible concepts for studying historical change: "(a) constancy of direction; (b) periodicy of events; (c) endogenous change; (d) length of causal regress; (e) stability of the rate of change."[6] These categories most readily fit economic history where changes in prices, production, and consumption (if there is enough data) can be fitted into a linear model where patterns can be graphed and juxtaposed with political events. Gerschenkron comes to no final conclusion as to the course to take, but he suggests that with no plan for action, concepts or models, no results will be obtained. However, it is possible to assert that this search for continuity can become an arbitrary exercise where the historian decides that a)there is a linear progression of events in narrative history; b)a pattern can be discerned in the action of certain variables; c)that this sequence is significant; and that d) this pattern can be extended

over time and space once it is found. This is a philosophical as well as a practical problem for it assumes that linkage is significant and possible, neither of which may be true.

Another approach to the problem of continuity may be found in the structural/functional approach to history where the historian seeks to determine the structure and function of social institutions and their changes over time. Fernand Braudel and the Annales school in France developed this vector. However, their notions of change and time differ from the tradition of sequencing events in a linear fashion in calendar time. Change is viewed "not as progress, regular development or continuity, but in terms of a need for other functions, or as part of a process of structuring, destructuring, and restructuring."[7] The dialectic of Hegel's concept of History reappears in the works of Braudel, Marc Bloch and Lucien Febvre. Change, despite the discarding of a Candidian notion of progress, is still linear. Time, however, is no longer an inexorable clock which marches at an even pace. Braudel introduces the notion of variable time: temps géographique: "change is almost imperceptible and consists of extremely slow cyclic regularities;"temps social: "shifts in economic and social structures to produce une histoire lentement rythmée;" and temps individual, "transitory, disjointed daily events."[8] This

sense of time as a fluid variable operating simultaneously at many different speeds is placed by Braudel against the framework of "permanent, unchanging and much repeated features which are 'constants.'"[9] In the case of his work on the Mediterranean of Philip II, this "grid" is formed by geography, and climate: "a history in which all change is slow, a history of constant repetition, ever-recurring cycles;" "l'unité humaine:" towns, peoples, routes, "the history of groups and grouping;" and the individual in "the history of events: surface disturbances, crests of foam that the tides of history carry on their strong backs."[10] Each level is less "constant" than the one preceding. Braudel termed this the history of "slow- and fast-moving levels, structure and conjuncture."[11]

The approach of Braudel may be contrasted with that of Foucault, the philosopher/historian who termed himself an archeologist rather than an historian. The task of an archeologist is to find artifacts, describe them, place them in the context of linear time layers, and finally to draw conclusions as to what these things indicate about the lives of people in past times and places. It is not assumed that continuity must exist, there may be ruptures or ends. Nor are patterns always more important than the individual instance, which may be an exception with profound consequences. The process itself and the accumulation of artifacts, descriptions, layers, contexts,

and explanations eventually is assumed to make self-evident as much as can be known, with the proviso that more discoveries may completely change the scenario. Often the conclusions drawn from archeology are made by historians who do not have the same compunction as archaeologists about making generalizations from the particular. Foucault rejects a paradigm of development and evolution which "makes it possible to group a succession of dispersed events, to link them to one and the same organizing principle ... to discover, already at work in each beginning a principle of coherence and the outline of a future unity."[12] "The task for archeology is to question the self-evidence of such classifications, to reveal differences, to locate these differences within a field, and to recognize multiple forms of discontinuous change."[13] This he takes to be the task of historians. However, Foucault also studies and creates order or constructs which can be discerned under the "surface" of the artifacts which are displayed. "Order is, at one and the same time, that which is given in things as their inner law, the hidden network that determines the way they confront one another, and also that which has no existence except in the grid created by a glance, an examination, a language..."[14] Thus, Foucault, even though he presented a post-structuralist critique of Braudelian structuralism by deconstructing totalities, still "reconstructed them in

a more satisfactory model and then in his later work" reconstructed the whole radical critique.[15]

The theoretical problem of continuity is, of course, much more complex than has been presented thus far. Theoretically inclined historians and the various proponents of poststructuralism, postmodernism, and world-systems theory continue to debate the issue in journals such as History and Theory. It is evident in these debates that the task of approaching Reality in its totality has dogged the twentieth century scholar. Whether it is a particular totality, a totality of particulars, or neither has been the crux of the debate over patterns and continuity in History. In his text on Western Marxism, George Lukas argued: "It is not the primacy of economic motives in historical explanation that constitutes the decisive difference between Marxism and bourgeois thought, but the point of view of totality..."[16] The world-system's approach is representative of the totalizing trend. Whereas, the complex, post-structuralist/ postmodern position of Foucault, Lyotard and Fredrick Jameson represents the second. These two tendencies are best described by Steven Best in his article "Jameson, Totality, and the Poststructuralist Critique" as 1) dialectical-totalizing Marxism which begins "with the assumption that reality, despite its dynamic, contradictory nature, is ultimately an intelligible whole,

comprehensible through a scientific or theoretical discourse..." and 2) poststructuralism- "which proceeds on the belief that all "texts" are constituted of the incommensurable fragments and particulars which cannot without a reductive violence, be assimilated to some larger whole."[17] The first trend concentrates on the "scientific" determination of a world-inclusive socio/economic structure formed by the "mode of production" and "class struggle." The second rejects every conceivable form of totality- including "society as a system, structure, or mode of production; (or) human history as a coherent process ..."[18] The post-postmodernists thus attempt to deconstruct history -- to "de-totalize" the totalizing of the modernists of which world systems theory may be said to be a part.

Structure and Performance of the Economy

The Hafsid period was one of intense change in the Mediterranean during which the ascendancy of Christian European states marked the control of Mediterranean, and later, Atlantic, trade. Ifrîqîya, as well, passed through a period in which agricultural production declined as pastoralism increased; and it became a transition point, not a producer, in international trade. However, it is only by examining the pre-existing patterns in the economy

of Ifrîqîya that the situation the Hafsids faced in the thirteenth century can be adequately described and explained. Usually the history of the Maghrib is divided according to Pre-history, Antiquity, and the Islamic era. Within those divisions, periods are further separated according to dynasty, each phase different from the one before. But, there are many factors which did not change as rapidly as the labels they have been given. The population, geography, and economy changed much more slowly than government institutions. Culture and society also evolved at a slower pace, despite significant diffusions of outside peoples. This has meant that economic patterns, such as land holding, water management, types of crops, trade routes, and merchant centers have formed a fragile line of development stretching far into the past of Ifrîqîya. However, there have been changes within this continuity with far reaching consequences for the population and those in power. Thus, the first section of this study will be devoted to examining some of the historiographical and theoretical issues concerning the Hafsid period and the search for economic patterns.

One of the major problems facing an economic historian of the Maghrib are sources. The modern historian of the Maghrib can be compared to the receiver at the rear of a long chain of transmission where the message invariably gets garbled as it passes down the line. This

is especially true for the economic history of the medieval Maghrib, where many documents yielding economic data no longer exist, or the general gist of the original is only retained within the work of a later writer. Moreover, early historians and geographers did not usually record figures relating to production, trade, or income. In addition, the data that is retained has been intentionally altered or selectively repeated in order to further the argument or cause of the writer or those in power. On some occasions, information is deliberately vague. In the case of North Africa, this filtering process has gone through several generations of western and Maghribi scholars as well, and has reflected their interests. Thus, there has been a great deal of research on strange and unusual phenomena, such as Sufism; or, as a product of political policy concerns, there has been work on geography, politics, and literature. The economic history of this period has been relegated to some general chapters on commerce or agriculture, and articles on trade or slavery. This dual problem of sources and previous scholarship leaves the economic historian at a disadvantage in terms of data, method, and theory.

Most scholars, faced with this dilemma, have concentrated on later periods of North African history, or have moved the venue of inquiry to Europe or further east. A perusal of the secondary literature shows that the

economic history of the medieval Maghrib has been largely centered on the question of the Saharan and Mediterranean trade with one notable exception, the work of Mohamed Talbi on Ifrîqîya before the eleventh century. His articles on letters of credit, and agricultural labor and landholding give an indication of where such an economic history of the Maghrib could go. But, to date there are few case studies or general overviews of the economy of the medieval Maghrib, and certainly none for a significant period of transition, the Hafsid.

Many economic historians have followed the adage: "To be an historian, you must know how to count." And thus, they have enumerated the number of people in a city, the bodies carried out of its doors due to the plague, the taxes collected, the soldiers marching off to war, the citizens slaughtered after a siege, or the bushels of wheat produced on a hectare. In the case of Ifrîqîya, this has often consisted of producing a list of products and kinds of taxes. But these numbers are the product of an economy, not the thing itself. They are part of what one theorist has called "performance." According to Douglas C. North, "the task of economic history is to explain the structure and performance of economies through time."[19] This choice of words points to several particular issues in economic history. First, its task is to explain an economy, or to determine what are its constituent parts

and how they function. Second, the level or efficiency of the functioning of these parts should be studied. Thus, performance refers to things like "how much is produced, the distribution of costs and benefits, or the stability of production."[20] Performance is also related to the ability of the economy to provide for the needs of the population, or to be competitive in international markets.

For medieval Ifrîqîya, performance in terms of production is difficult to determine since the numbers are often not available except in a relative sense. The documents may state that this was a bad or good year for wheat production, or that a region was devastated by a plague and one thousand people died per day. Unfortunately, we do not know what a poor year of production yielded, nor do we know for how many days people were dying or the original population figures. But, sometimes even a single statistic can indicate significant characteristics of an economy. For example, for Ifrîqîya, al-Bakrî, probably upon the authority of al-Warrâq (tenth century), mentions grain yields of 100 to one in good years in the Sahil around Qayrawân.[21] Yet, at a similar time in Egypt it was ten to one; and in Carolingian Europe it was 2-2.5 to one.[22] Either Ifrîqîya had <u>extremely</u> high production rates, the other figures are low, or al-Bakrî was incorrect. However, studies by archaeologists of the Tripolitanian pre-desert also have suggested that such a

high ratio was likely for the region in Antiquity. Put in this context, the wealth of Ifrîqîya based on the trade in grain in antiquity and the Islamic era is quite possible. Estimates of olive oil production and shipment to Rome by historians and archaeologists also suggest that Ifrîqîya may have produced over half of the olive oil consumed in the Mediterranean during the Roman occupation of that region. Once these two facts are put together the likelihood that the success or failure of the Ifriqiyan economy relied to a great extent on agriculture and the sale of those commodities through long-distance trade is quite high. Did this production continue into the Islamic era? There is every indication that it did. However, the lists of products shipped to Rome and later carried aboard ship to the East in the Islamic period also included many pastoral by-products; leather, hides, wool, wool fabrics, and cheeses. So agricultural production was not the only sector of the economy which was important. However, the ability to "deduce" the overall yield of Hafsid Ifrîqîya is almost impossible. Normally this could be determined if the amount of ʿushr, or zakât on agricultural production, were known for a given period.[23] This usually amounted to five percent (a twentieth) for irrigated lands, and ten percent for dry-farmed lands.[24] In addition, the owner had to pay kharâj on the land itself. But unless the proportion of land paying the five percent and that the

ten percent is known, the total amount gathered in ʿushr on Muslims, if it is known, can not just be averaged as a 7.5% tax as Chalmeta does for al-Andalus to obtain a level of production. Also, in Ifrîqîya there were numbers of tribes who were Khawârij, and landowners who were Jews. Was ʿushr collected on their production? And, finally, only if all the taxes are collected completely and fairly, will there be an adequate record upon which to judge production. But, this is perhaps a moot point because there are no figures for ʿushr and few on zakât for Ifrîqîya under the Hafsids.

The performance of an economy can be determined by rates of production. But, how is it possible to achieve a measure of development or production in an economy without having hard data? There are no lists of the taxes collected by the Hafsids. Nor are there calculations of total production of wheat or revenues from trade. Charles Issawi stated that "The degree of development (or, if you prefer, material civilization) of any society is set by the size of its surplus (the total amount it produces minus the amount need for the bare subsistence of the population) and the uses to which the surplus is put."[25] This surplus, of course, need not be a product of a healthy economy, a factor which Issawi overlooks; it may also be a product of an efficient method of extraction or control over the means of production. Also, the existence

of surplus does not in itself indicate from which sector of the economy it is being derived. However, his suggestion that the existence of a surplus can identified by how it was spent is a sound one. Several kinds of spending need to be assessed: spending by the government and aristocracy (which may not always be an indication of surpluses), and spending by the middle or lower class, which will indicate surpluses within the economy. However, often we see what surpluses have purchased for the rich, not the poor: estates, palaces, government positions, influential marriage partners, luxury items, and pilgrimages to Mecca. In the case of Hafsid Ifrîqîya, the first few leaders after the establishment of an independent state undertook a grandiose building scheme in the city of Tunis, establishing new mosques, madrasas and palaces. For example, al-Mustanṣir built an addition to the Aqueduct of Hadrian and constructed the new Aqueduct of the Bardo to bring water inside the walls of the city. He also constructed the parks of Râs al-Ṭâbiya and Abû Fihr. Many of the gates of the city were constructed during the reign of Abû Zakarîyâ' and al-Mustanṣir. There were three madrasas in Tunis by the middle of the thirteenth century; one of them, Madrasa al-Hawâ, was founded by the princess ʿAṭf, the mother of al-Mustanṣir. This building of madrasas continued into the fifteenth century in the city of Tunis, bringing the number to over

twenty. There is no need to enumerate them all here. Abdelaziz Daoulatli compiled a detailed work on the subject of the city of Tunis under the Hafsids which gives a good indication of the amount of wealth spent by the ruling family and wealthy aristocracy of the city.[26] At the same time, however, the city of Tozeur and Gabes in the south were reeling from the damages inflicted by the fight between Ibn Ghâniya and the Muwahhidûn at the end of the twelfth century. The description of al-ʿAbdarî in the mid-thirteenth century and al-Tijânî in the fourteenth reveals a patchwork of partially destroyed agricultural systems interspersed with areas which had been spared in the fighting. These are the other half of the issue of surplus spending. People in villages throughout Ifrîqîya had less tillable land than in the past; and as a consequence, probably had lower rates of surplus spending. When Leo Africanus estimated the populations of towns in the sixteenth century, they were considerably smaller than in the past, and houses were not rebuilt or shops restocked. However, the surplus spending of the rich may not have been derived from agricultural production at all under the Hafsids. It was more likely a result of import and export duties on merchants, and government monopolies on certain kinds of production and trade.

According to Issawi, "the size of surplus is, in turn, determined by four factors: the amount of energy

available to the society, the society's technology, the mix of its economy, and the size of its population."[27] The organization of production and political stability of the state, what North termed "stability of production," should also be added to the equation. This is evident in what is known about the size of the population in Ifrîqîya under the Hafsids. There are few exact figures for the demography of the Hafsid period. We do know that different urban centers were more important than in previous eras and the population may have been lower. Many villages were in ruins by the thirteenth century, and the inhabitants had been massacred by the Muwahhids, Ibn Ghâniya, the Hafsids, or all three. Al-Tijânî, travelling with the sultan, Abû Liḥyânî, on his trip to Mecca in 1306-9, described the terrible executions of the population of entire towns and the destruction of hectares of olive trees which had taken place in the early thirteenth century. But whether the people fled to the safety of cities, such as Tunis, or perished as well is unknown. Under the Hafsids, the city of Tunis had become the focal point for government and commerce in Ifrîqîya. Of those who estimated its population, Ibn Shamma' cited 7,000 households in 762/1361; Adorne in 1470 stated that the city contained 800,000 inhabitants, and with 60,000 in the army procession of the sultan, and that in 1468, in the space of six months, 260,000 had died of a plague; Leo

Africanus at the beginning of the sixteenth century estimated 10,000 households.[28] If one takes the lower figure of 7,000 households, then Tunis held no more than 70,000 inhabitants, if a household is counted at an average of ten persons. However, Brunschvig used a factor of five when estimating the population of Constantine and Bougie at 40,000.[29] Thus, Tunis, the Hafsid capital would have a population of 50,000 or less, which seems much too small. If Adorne's figures are used, one hundred years later the city contained about one million inhabitants. And in the next century, the city contained only 3,000 households more than it had almost two hundred years earlier. These growth patterns can be best compared to those of al-Andalus in the same period, where cities like Granada reached levels of 100,000, or more, partly due to immigration. Braudel estimated between 25 to 35 million inhabitants for all of North Africa in the sixteenth century, of which at least half belonged to Egypt.[30] So, the total population of the territory from Barqa to Fez would be about 15 million. Obviously, the figures do not match; and, probably Adorne's estimates were much too high. However, other estimates of plague deaths in 1348 and 1468 in Tunis counted up to 1,000 bodies a day for the space of a month or a year respectively;[31] ie. 30,000 a month or a high of 365,000 deaths for a year, or perhaps a lower average of 100,000. In this case, the other two

figures are too low! It is possible that there were wild fluctuations in the population if we take into account the recurrence of epidemics and plagues in the fourteenth and fifteenth centuries. An epidemic affected Ifrîqîya in 1305 and the next few years after, in 1348-50 during the Black Death, and in 1468, at least - if not more often. However, if disease affected the population on a regular basis, even high population growth rates would be unlikely to keep up and population levels could have remained stagnant. The study by Michael Dols on the population of Cairo during the Black Death shows similar problems for estimating population rates for the fourteenth and fifteenth centuries. However, Dols doubts that the population of the Middle East recovered from its loss of about one third of its population during the Black Death.[32] In the end, the size of the population is relative. It can be too much, if the production of food cannot feed it, and too little if there are not enough laborers to till the fields. However, the recurring man-made disasters caused by war and epidemic disease during the Hafsid period undoubtedly affected agricultural production.

Ifrîqîya had a mixed economy during the medieval period which helped to alleviate some of the difficulties faced by the rural and urban populations. It also had many resources at its disposal in both the form of land and

labor. It relied on agriculture, pastoralism, craft industries, and local and international trade. Even during the Hafsid period, olive oil and wheat were produced. Much of the land of Ifrîqîya was also turned over to pasture, with horses, sheep, cattle and goats grazing in plain and mountain regions. And, the area along the edge of the Sahara had many communities where camels were raised. However, Ifrîqîya was also an exchange point for products from the Sudan: slaves and gold; and products from the East: spices. This trade perhaps made more profits for the state than did the sale of commodities both in the form of taxes and because ships owned by the ruling family often carried this merchandise. During the Hafsid period, long-distance trade was encouraged by the signing of preferential trade agreements with the Italian city states and the Crown of Aragon, the granting of fonduqs and concessions, and the building of quarters for foreign traders and diplomats - including the construction of churches. Finally, a smaller portion of the economy was devoted to the production of manufactured items: cloth, glass, ceramics, leather goods.

Certain sectors of the economy of Ifrîqîya were heavily dependent on technology for their success. The introduction and maintenance of irrigation systems in the Sahil were essential to agricultural production. And, an extensive construction of water control systems in the

Sahil took place under the Aghlabids and Zirids. Later, the Hafsids provided water for Tunis and its environs. They built cisterns, water wheels, and qanats. The archeological record as studied by Solignac, the descriptions of medieval travellers, and the number of fatwâs relating to irrigation and land disputes all attest to a continued build-up of agricultural production and the introduction of more efficient water technology. Even Jews owned land which they farmed through the means of irrigation. Thus, the stability of the economy depended partially on the success of agriculture and irrigation. One does not need to look back to the invasion of the Banû Hilâl in the eleventh century to find a reason for the difficulties faced by the Hafsids as they tried to reconstitute the economy of Ifrîqîya upon their establishment of control over a region which had been ravaged by warfare. They encouraged the position of Ifrîqîya and its economy as a middleman in the Mediterranean trade which was coming to be monopolized by the Italians, Catalans, and others. Tunis became a bustling entrepot in a trade which contained many items not produced there. However, they did not concentrate on policies which would enhance agricultural production. Instead they divided land holdings in regions they conquered by force, and disrupted the usual mode of cultivation by granting ʿiqtas to the Arab tribes.[33]

One way of looking at technology is as a system or means of reaching an end. In this case law can be regarded as a technology, or a means of organizing and maintaining the economy and society of the medieval Maghrib. North would have included law under the heading of a structure or institution. Structure, according to North, points to the determinants of performance: "political and economic institutions, technology, demography, and ideology of a society."[34] What do we mean by institutions? "Institutions are a set of rules, compliance procedures, and moral and ethical behavioral norms designed to constrain the behavior of individuals." A codified set of norms is what we mean by laws. In the case of Islamic Ifrîqîya, the development of Mâlikî law reaches its conclusion during the Hafsid period when it becomes the dominant form of Islamic law in Ifrîqîya. The struggle for Mâlikî supremacy can be seen in the intellectual sphere of Qayrawân under the Aghlabids and Zirids; however, in the fourteenth century it's success is marked by the appointment of Ibn ʿArafa, a conservative Mâlikî scholar, to the position of supreme qâḍî in Tunis. By the Hafsid period, Mâlikî legal scholars had become quite adept at dealing with economic issues as well. Refinements on the concept of zakât or sharik not present in al-Qayrawânî's Risâla or the Mudawwana appear in the Miʿyâr of Wansharîsî and the Nawâzil of Burzulî. The discussion of water

rights, taxes, and business practices produced a set of precedents largely established by the issuance of fatwâs and discussions on points of law. Along with law came the development of business practices and mechanisms such as the simsâr or broker, letters of credit, banking procedures, and methods of determining responsibilities for losses or profits in business transactions. The development of a complex bureaucracy under Hafsid rule is also an indication of the further refinements of institutions or technologies for governance and the management of the economy.

Sources

The sources used in this study have varied according to the period under discussion. For the period of antiquity, the majority of the sources were archeological reports. The written documents from this period like Pliny and Herodotus are not of much help in discussing the economy of Ifrîqîya since their descriptions are often fantastic in nature with stories of strange peoples and customs. However, inscriptions containing products to be taxed, the remains of water supply technologies, botanical remains, pottery shards, and oil press sites have proved to be invaluable in the analysis of economic patterns. In this regard, the work of Brogan on Ghirza, Mattingly on

oil production, Shaw on markets and irrigation systems, and the Libyan Valley Survey Project which studied the pre-desert region of Tripolitania have been especially revealing. It would be impossible here to list the hundreds of reports used in this chapter: the studies of inscriptions, fortifications, the limes, pottery shards, bones, and botanical remains. However, despite the over-concentration on antiquity by archaeologists, there is still much work which needs to be done to synthesize the information and explain the patterns of economic development at the time.

In contrast, for the early Islamic period there have been few archeological studies except those dealing with monuments like the mosque at Qayrawân, or the walls of Sousse. Solignac's study of irrigation systems near Qayrawan is an exception to this. The other sources then fall into the categories of geographies, chronicles, biographies, and legal texts. Perhaps the most detailed of the geographical works is that of the eleventh century Andalusi author, al-Bakrî. His Kitâb al-masâlik wa al-mamâlik has invaluable information on trade routes and agricultural production; but, in many places it is drawn from the work of a tenth century Andalusian author, al-Warrâq, who had lived in Qayrawân for many years. Thus, it is possible to state that at some time in history conditions were as he described them. But the problem is

when. This lack of specificity as to time span is a problem with all the geographical sources such as al-Idrîsî, and al-Ya'qûbî. Their purpose was not to be exhaustively detailed, but to give a general picture of the peoples and and places in the world. So, these sources will be presented in a chronological fashion in the chapter on the early Islamic period in order to determine a general sequence of changes, but not to date those changes accurately. The most revealing sources for this period are the Ibâḍî chronicles such as Abû Zakarîyâ's Kitâb al-sîra wa-akhbâr al-a'imma, written in the second half of the eleventh and beginning of the twelfth century. There is no edited Arabic text, only a French translation done by R. Le Tourneau and continued by H. R. Idris in the 1960's. This text relates the events in the life of the Ibâḍî community in a narrative fashion, with much attention to the details of the lives of pious people. However, it does give a picture of the movement of the Ibâḍîs along caravan routes, and the occupations of many of the figures he discusses. Perhaps the most detailed information is that to be found in biographical collections, a favorite genre of the medieval writers. In this case, al-Mâlikî's Riyâḍ al-nufûs, a collection of accounts about the 'ulamâ' of Qayrawân before 356/967, provides information about the professions, backgrounds, and economic status of important figures in Qayrawân, as

well as a detailed description of the city itself. Finally, what is the most rewarding source for the medieval period in North Africa is Wansharîsî's Mi'yâr, a collection of fatwâs compiled in the latter part of the fifteenth century. This collection, which in its edited version comprises twelve volumes and an index, includes legal opinions of all the famous 'ulamâ' of Ifrîqîya, the Maghrib, and al-Andalus dating back to the ninth century. Wansharîsî studied under the great scholars of Tlemcen such as the imâm Qâsim al-'Uqbânî. He later moved to Fez where he compiled his great work, the Mi'yâr. Many of the fatwâs in this collection were issued by scholars from Ifrîqîya such as Sahnûn, and Ibn 'Arafa. In them the complete line of argumentation on a question is followed, so that it is possible to follow both the precedents for a legal opinion, and sometimes, the specific events which led to the need for legal consultation in the first place. In this dissertation, the fatwâs are used as they relate to the time period in question; and there has been every effort made to avoid the assumption that opinions of legal scholars in one generation were still held by the next.

The work of Wansharîsî was used, as well, in the chapter on the Hafsid period. However, the thirteenth century was marked by a new kind of literature, that of the Rihla, or travel diary of those going on pilgrimage. For the Maghrib, the main pilgrimage caravan would start

in the west, in Fez, and pass through the coastal centers to Tunis, down the coast of Ifrîqîya to Sousse, Sfax, and Gabes, and finally to Tripoli and Barqa. The Riḥla of al-ʿAbdarî at the end of the thirteenth century, and that of al-Tijânî compiled in 1306 are good examples of this genre that have unique details on the Hafsid territories. Al-Tijânî's work is especially useful because he was travelling in the entourage of the wazir, al-Liḥyânî; and, therefore, he met important people along the way. However, as a confidant of the wazir, he avoided including information in his diary which might be sensitive for the state, such as the amount they extracted in taxes along their route. And finally, of course, for the Hafsid period, the work of Ibn Khaldûn, especially his Kitâb al-ʿibar, provides the most detailed information on the sequence of events and actions of individual rulers.

One problem with the use of sources is that of consulting an earlier work to look at a later period or vice-versa. This has been avoided when at all possible, especially for the Hafsid period, which, because of the turmoil which preceded it, faced a very different set of circumstances than it predecessors.

Conclusion

Ultimately, judgements as to the stability or

viability of the economy under the Hafsids can be made by looking at results as well as institutions and technology: did the government have to resort to other than legally sanctioned taxes to raise revenues? Were people dying of starvation? Did the government need to import grain supplies to feed the population? Were there tax rebellions? Did merchants sell their shops and leave, or did more come to set up business? The assessment of the economy does not have to be reached by the study of numbers alone. Perhaps the individual whose name has become synonymous with the Hafsid period, Ibn Khaldûn, should be allowed to have the last word of the economy of Ifrîqîya. In the Muqaddima or Introduction to his Kitâb al-ʿibar, Ibn Khaldûn, along with his theory of the state, comments on the accumulation of wealth, and the workings of the market. For him, one of the crucial factors affecting the economy was justice. Injustice in taxation, interference with the market by the ruler either through monopolies or price fixing, and confiscation of property were some of the prime factors in bringing about the ruin of a state. If a ruler sought to make profits and increase revenues by acquiring livestock and fields, he would both expose himself to the fluctuations of the market and discourage the participation of merchants in it. "Farmers and merchants will find it difficult to buy livestock and merchandise and procure cheaply...the goods they

need...and they cannot compete with the ruler."[35] The market will decline; the ruler will seek to control prices; and the incentive to produce will be further eroded. Also, the ruler will have to obtain some of this property by confiscations which will ultimately lead to resentment, further business slumps, decay and depopulation.[36] One of the greatest injustices of all, however, was the imposition of forced labor on the lands of the ruler; and, the manipulation of the market in land by buying it cheaply and selling it high.[37] In his sections on the economy, Ibn Khaldûn concentrates on commerce as the sector of the economy which produces the highest profits and revenues. It is not production by itself which provides profits and wealth (or capital - mutammawwal), but commerce. His ruminations on the role of gold and silver as measures of the accumulation of wealth and his concept of the importance of the market, are an indication of the role which they played in the economy of his day. The injustices of which he speaks, to which we can also add attempts on the part of the ruler to control exports, imports and preferential trading concessions, were part of the practices of the Hafsids and their ruling elite. Thus, both the economy and the discussion of it had become more complicated and volatile by Ibn Khaldûn's day.

Given the theoretical, as well as practical, considerations in regard to revealing continuities,

discontinuities, patterns, constants and ruptures, the analysis which imbues the following chapters is subject to revision. Nor is it all-inclusive. But, there are patterns in the past which are significant and reveal more about a given time period than the narrative recitation of events. Therefore, in what follows there are self-imposed restrictions and a specific method. The discussion will be focused on the region under Hafsid control, called Ifrîqîya, during the thirteenth and fourteenth century; however, it will extend far into antiquity, south of the Sahara, and across the Mediterranean tracing a framework for the Hafsid period. It will not be a narrative history, but rather a presentation of patterns of land use, production, labor, and exchange/trade. Given the nature of the data and previous research, the material presented will often be uneven - detailed in places and sketchy in others. Also, whenever possible, archeological evidence and eyewitness accounts will be used. This will not be an exhaustive account, but will attempt to approach the historical record as an archeologist, looking for clusters, dissemination, and changes which may have some relevance to the period discussed in this thesis. As is evident in the discussion presented thus far, there are many stumbling blocks along the path of investigation laid out in the following chapters. This path will wend its way through a discussion of historiographical and theoretical

issues, the history of the economy of Ifrîqîya in Antiquity as found in the archeological record, a perusal of the Islamic period, and finally the Hafsids. Hopefully what follows will not resemble the story recounted by Marc Bloch in his book on the historian's craft: "Not so very long ago, during a relief march at night, I saw the word passed down the length of the column... "Look out! Shell holes to the left!" The last man received it in the form, "To the left!" took a step in that direction, and fell in."

1.As translated by H.T. Norris, The Berbers in Arabic Literature, (London and New York: Librairie du Liban, 1982), xxiv, from pages 1-2 of the text.

2.Roman Jakobson, Verbal Art, Verbal Sign, Verbal Time, (Oxford, 1985), 3.

3.See Hayden White, "The Question of Narrative in Contemporary Historical Theory," History and Theory, 23:1, (1984), 1-33.
"Narrative is at once a mode of discourse, a manner of speaking, and the product produced by the adoption of this mode of discourse. When this mode of discourse is used to represent "real" events, as in "historical narrative," the result is a kind of discourse with specific linguistic, grammatical, and rhetorical features... Both the felt adequacy of this mode of discourse for the representation of specifically "historical" events and its inadequacy as perceived by those who impute to narrativity the status of an "ideology" derive from the difficulty of conceptualization the difference between a manner of speaking and the mode of representation produced by its enactment." 32-3.

4.Alexander Gerschenkron, "On the Concept of Continuity in History," (1962) republished in his book Continuity in History and Other Essays, (Cambridge: The Belknap Press of Harvard University Press, 1968), 11-39.

5.Ibid., 38.

6.Ibid., 21.

7.Traian Stoianovich, French Historical Method: The "Annales" Paradigm, (Ithaca: Cornell University Press, 1976), 38.

8.J. H. M. Salmon, Review of Braudel's Écrits sur l'histoire, History and Theory, 10 (1971), 348.

9.Fernand Braudel, The Mediterranean and the Mediterranean World in the Age of Philip II, vol. II, (revised edition, 1966), trans. by Siân Reynolds, (New York: Harper and Row, Pub., 1973), 1239.

10.Ibid., vol. 1, 20-1.

11.Ibid., vol. II, 1242.

12.Michel Foucault, Archeology of Knowledge, (1969), trans. Sheridan Smith (New York: Random House, 1972), 21-22. See also the discussion of Foucault's theories in Pamela Major-Poetzl, Michel Foucault's Archeology of Culture: Toward a New Science of History, (Chapel Hill: The University of North Carolina Press, 1983), chapter 1.

13.Major-Poetzl, 14.

14.Foucault, The Order of Things: an Archeology of the Human Sciences, (1966), trans. by Alan Sheridan-Smith, (New York: Random House, 1970), xx. Also, for a discussion of Braudel and Foucault see the first chapter of K.N. Chaudhuri's Asia Before Europe: Economy and Civilisation of the Indian Ocean from the Rise of Islam to 1750 (Cambridge: Cambridge U. Press, 1990), where he proposes the addition of set theory of structures to Braudel and Foucault's ideas and specifies "for historical analysis an abstract structural 'space' with six dimensions: scientific space, real time, functions such as the causal relationship between rainfall and crop raising, and the mental representations of each of these three physical planes. Any point in this structural space can be identified either by its co-ordinates to the six dimensions or relative to other points using the same dimensions. The relative positions of the points are defined as structural relations and the limits of their variability are given by the limits of the structural space." 30.

15.See Steven Best "Jameson, Totality, and the Postructuralist Critique," in Douglas Kellner, Postmodernism: Jameson Critique (Washington, DC: Maisonneuve Press, 1989), 337.

16.Georg Lukas, History and Class Consciousness, (London: Merlin Press, 1971), 27.

17.Best, op. cit., 336.

18.Ibid.

19.Douglas C. North, Structure and Change in Economic History, (New York: W.W. Norton and Company, 1981), 3.

20.Ibid.

21.Abû ʿUbayd ʿAbd Allâh b. ʿAbd al-ʿAzîz al-Bakrî, Kitâb al-masâlik wa al-mamâlik, ed. Baron MacGuckin de Slane, with Arabic title Kitâb al-mughrib fî dhikr bilâd Ifrîqiya wa al-Mahrib, and French title, Description de l'Afrique

septentrionale, (Alger, 1911), 24.

22.Charles Issawi, "Technology, Energy, and civilization: some Historical Observations," International Journal of Middle East Studies, 23 (1991), 282. He cites E. Ashtor, A Social and Economic History of the Near East in the Middle Ages (Berkeley and Los Angeles, 1976), 50; and, B.H. Slicher van Bath, Yield Ratios, 810-1820, (Wageningen, 1963).

23.Pedro Chalmeta, "An Approximate Picture of the Economy of al-Andalus," the Legacy of Muslim Spain, 749.

24.See the fatwa of Abû ʿAbd Allah al-Ḥaffâr (15th cent. Andalus.in the Miʿyâr, (1), I, 299. Amar, II, 128, where he is asked if zakat of ʿushr (one-tenth), or a twentieth is due on land normally irrigated but now using rain water. He answers that only the ʿushr is due, but if irrigation is used, then pay the twentieth. Another fatwa of Al-Ṣâigh, (Miʿyâr, (1), I, 298) refers to the tax of a twentieth on irrigated land. See as well the discussion in Yaḥyâ b. Adam's Kitâb al-Kharâj as edited and translated by A. Ben Shemesh, Taxation in Islam, vol.1, (Leiden: E.J. Brill, 1958), 103-109.

25.Issawi, op. cit., 281.

26.Abdelaziz Daoulatli, Tunis sous les Hafsides: evolution urbaine et activite architecturale, (Tunis, 1976).

27.Issawi, op. cit., 281.

28.Anselme Adorne, in Deux récits de voyage inédits en Afrique du nord au XVe siècle, edited by Robert Brunschvig, (Paris, 1936), 200 and note 1, 215.

29.Robert Brunschvig, La Berbérie orientale sous les Ḥafsides des origines a la fin du XVe siècle, (Paris, 1940), vol. 1, 388.

30.Fernand Braudel, The Structures of Everyday Life: Civilization & Capitalism, 15th-18th Century, vol.1, trans. by Sian Reynolds, (New York: Harper and Row, 1985), 44.

31.See Michael W. Dols, The Black Death in the Middle East, (Princeton: Princeton University Press, 1977), 64; Adorne, 200.

32.Dols, op. cit., 223.

33.See Michael Brett, "The Journey of al-Tijânî at the Beginning of the Fourteenth Century A.D./Eighth Century A.H.," Libyan Studies, 7 (1975-6), 44-5.

34.North, op. cit., 3.

35.Ibn Khaldun, Muqaddima, (ar) 497; Rosenthal trans., II, 93.

36.Ibid., (ar) 507, trans. II, 103.

37.Ibid., (ar) 512, trans. II, 109.

CHAPTER 1

THROUGH A GLASS DARKLY
THE HISTORIOGRAPHIC DILEMMA

> "Human beings make their history in cognizance of that history, that is, as reflexive beings cognitively appropriating time rather than merely 'living' it ... Getting to know what goes on 'in' history becomes, not only an inherent part of what 'history' is, but also a means of transforming 'history.'"[1]

Despite over three hundred years of Hafsid control over Ifrîqîya, roughly corresponding to the period of the European Renaissance, not even three western scholars have written books about this North African[2] trading partner of the Italian city states, object of the crusade of Louis IX of France, and ally of Jaume I of Aragon. Not one collection of Hafsid documents, compilation of Hafsid literature, or fatwâs exists in a western language, and there are not many in Arabic. Published sources from the period are primarily chronologies, travelogs, and geographies. Yet, the Hafsids were both the founders of a

"dynasty" and heirs of the Muwahhid tradition, about which there has been some research and even a greater amount of speculation.

When the power of the Muwahhidûn began to wane in the western Maghrib in the early thirteenth century, accompanied by their discarding of the religious doctrine of the Mahdî, Ibn Tûmart, the Hafsid governor of Ifrîqîya, Abû Zakarîyâ' Yaḥya b. al-Naṣr, ceased to cite the name of the Muwahhid caliph in the Friday prayers (625/1227) and had the khutba in the Friday mosque announced in the name of the Mahdî, and the khulafâ' râshidûn in 627/1229, and called himself amîr. In 634/1236, Hafsid rule in Ifrîqîya was officially marked again by the recital of the khutba in the name of Abû Zakarîyâ'.[3] The Hafsids ruled Ifrîqîya until the sixteenth century, and the area over which they had control either expanded or contracted in response to internal stability or external pressure. At the height of their power in the late thirteenth century, under Abû ʿAbdallah Muḥammad al-Mustanṣir, Tunis, Ceuta, Tangers, Granada, Fez, Alger, Constantine, Bougie, Tlemcen and other urban centers all either paid homage to or came under the control of the Hafsids. Even the king of Kanem and Bornu to the south sent messengers with gifts for the Hafsid ruler.[4] In 657/1259, after the fall of the Abbasid caliph in Baghdad, al-Mustanṣir was briefly recognized as the caliph of all the Muslims by the sharîf of Mecca.[5]

Even the crusade of Louis IX fell apart at the feet of al-Mustanṣir (even though it was disease which conquered the troops, he took the credit). Succeeding rulers were not always so successful; they were besieged by insurrections from within and neighboring forces chipping away from without. By the end of the Hafsid rule in 1574, the rulers were not much more than puppets for the Ottomans.

These fluctuations in Hafsid power have been described in the Arabic sources in detail. Modern European and Maghribi historians have followed suit by chronicling political events as did their predecessors. The image of the Hafsid period in the writing of European and Maghribi scholars is variously portrayed as a time when "despotisme, tyrannie, violence et terreur ..." reigned[6], a "sorte d'arrêt de l'évolution"[7] in which "la production intellectuelle ou artistique sous les Hafsides ne brille pas...;"[8] or conversely, it was part of "a period of cultural flowering in all parts of the Maghrib... the last flowering of a waning Andalus;"[9] and, at least in the thirteenth century, a time of peace and stability.[10] The overwhelming picture, however, described in the secondary sources is of three centuries of upheavals with each historian "rooting" for a different point as the beginning of the "end" which is alternately placed in the thirteenth, fourteenth, fifteenth, or sixteenth century.

How is it possible to have such divergent

interpretations of the same time period? Why is there such a pointed focus on the notion of "crisis"? And, why has there been so little research on the Hafsids? These questions, as well as others must be dealt with by historians of the period, and of "medieval" North Africa in general, in order to open new avenues for exploration. Otherwise, researchers will be condemned to discussing the same issues ad infinitum. Through investigation of the historiography of this period, both in the context of contemporary Maghribi scholarship, and colonial and post-colonial European writing, it is possible to unravel some of the strands which have firmly held scholars to specific issues or interpretations. Some of the problems lie directly with the nature of the primary sources, and others in contemporary politics; but, the majority are a product of what Edward Said railed against in his book Orientalism. This last factor is perhaps not surprising since the overwhelming majority of secondary material on the medieval Maghrib has been produced by French scholars, mostly in the first half of the twentieth century. However, with the movement to Arabize and reclaim their heritage which has swept across North Africa since the 1970's, there has been renewed interest in the Hafsid period.

Interestingly, it is more recent Maghribi scholarship which has emphasized the negative aspects of Hafsid rule

as an indication of the "bankruptcy" of their reign. In an article published in 1985, a Maghribi scholar, M. Redjala discusses Ibn Khaldûn's descriptions of and attitudes toward torture and "la mort violente" as evidenced in the descriptions of the arrest, detention, torture and deaths of political figures in the thirteenth and fourteenth centuries under the Hafsids and the Merinids.[11] Among the cases he discusses is that of Abû al-ʿAbbâs al-Lulyânî (died 1260/1), a scholar from Mahdîya who was forced, according to Ibn Khaldûn, to accept the position of tax collector during the reign of al-Mustanṣir.[12] He became rich from his post, was accused of diverting funds, and was arrested and beaten until he died. All of his friends and his parents were put to death as well.[13] Other individuals, such as Ibn Khaldûn's great grandfather (d. 681/1283) were tortured and then strangled,[14] and some even committed suicide under the pressure of interrogation. The point in dwelling on these sordid details, however, is not to reveal anything significantly different about the Hafsid court from that in other states at the time, nor was Redjala trying to indicate an inherent weakness and instability, but rather that "pour Ibn Khaldun - et il le fait souvent sentir - l'homme reste toujours sacré, soutout l'orsqu'il ne depose d'aucun moyen de defense coupable ou innocent, toute violence exercee sur la personne dans ces conditions est condamnable, hier

comme aujourd'hui."[15] Thus, an article on the theme of torture in the writings of Ibn Khaldûn becomes a vehicle for commentary on the practice of detention and torture of political prisoners in North Africa today. And while it is undoubtedly true that these events occurred, and that Ibn Khaldûn reported them, the question of their significance and interpretation at the time is still to be resolved. Unfortunately, the effect of the article is to perpetuate the vision first disseminated by European orientalists of the violent nature of "oriental" governments.

This theme of the "abuse" of human rights is the focus of another article by Ferid Ben Sliman in the Tunisian publication, IBLA, in 1991. Entitled "Despotisme et violence sous les Hafsides," the article describes the period as "...se limiter aux intrigues de cour, aux trahisons, aux règlements de comptes, aux détournements de fonds, aux revoltes et aux répressions sanglantes, aux tortures et aux supplices sous des formes qui nous paraissent aujourdhui d'une brutalité inhumaine."[16] Based on the accounts of Ibn Khaldûn, Ibn al-Qunfudh and al-Zarkashî, Ben Sliman recounts a litany of examples of the violent exercise of power where individuals, sometimes innocent, were arrested and tortured because of political rivalries or unacceptable ideas. According to Ben Sliman, this repression maintained a regime of terror which was ultimately demoralizing for the population and ruinous for

the regime.[17] Thus, despotism becomes an explanation for the decline of the Hafsids, and by extension a criticism of any government which employs such methods.

In order to justify the use of the term despot to describe Hafsid rulers, Ben Sliman traces the use of the word back to a reference in al-Zarkashî where the first independent Hafsid ruler, Abû Zakarîyâ', claims to be amîr and ceases to recite the name of the Muwahhid caliph in the khutba in 625/1227. Al-Zarkashî terms this the awwal daraja fî al-istibdâd[18] (which can be translated either as the first step in becoming independent or in despotism). By using the term "despotism," an alternate but secondary use of the term, Ben Sliman places his argument within the controversy about the "oriental despot." This is made clear from his use of a definition of despotism presented by Grosrichard in his book Structure du sérail published in 1979 where a despot's power depends on the "bon plaisir du prince qui peut réduire à néant."[19] This definition is used then as a framework for examples of Hafsid cruelty such as the case where the famous thirteenth century author, Ibn al-Abbâr was executed and his writings were suppressed after becoming a victim of court intrigue. The most important example for Ben Sliman, however, is that of the rebellion of Ibn Abî ʿImâra in January 1283 which succeeded in overthrowing Abû Isḥâq Ibrahîm. Ibn Abî ʿImâra is

contrasted favorably by Ben Sliman with the bloody and "debauched" practices of Abû Isḥâq, especially for his delivering Tunis from the pillage of Arab tribes and ridding Tunis of Christian mercenaries and foreigners.[20] Abun Nasr, however, pictures the usurper, Ibn Abî ʿImâra, as an oppressive and unpopular leader.[21] In 1284, Ibn Abî ʿImâra was overthrown, captured, whipped, beheaded and his body was thrown in the Bay of Tunis. This treatment of Ibn Abî ʿImâra was evidence for Ben Sliman of a weakness in the Hafsid state which required the use of "tous les moyens, y compris celui d'une politique de la terreur."[22] In this way, cruelty and oppression come to equal despotism.

Although it is true that there were numerous examples of the use of torture and the execution of political enemies under the Hafsids, Ben Sliman would have done well to consider the second half of the title of Grosrichard's book: La fiction du despotisme asiatique dans l'occident classique. The use of the word despot to indicate a cruel and tyrannical leader is a creation of European philosophers of the late seventeenth and eighteenth centuries according to Grosrichard, who traces the term back to Aristotle where it had a much more positive concept. For Aristotle, "le pouvoir despotique est celui d'un homme libre sur un être privé, par nature, de liberté."[23] Therefore, for Aristotle, all forms of

government were forms of despotism, meaning rule by a master.[24] The negative concept of the despot, Grosrichard attributes to Montesquieu. It is Montesquieu in his L'Esprit des Lois who defines the despot as one who puts himself above the law and who, in his Lettres Persanes, describes "la politique orientale" as a reign of despotism.[25] This was thought by Montesquieu to be an inevitable consequence of warm climate, which he associated with despotism, and thus an explanation of how Europe could never suffer it for long.

In fact, it is the philosophes of the Enlightenment: Montesquieu, Voltaire and Rousseau, who present the Orient, and by extension, Islam, as the antithesis of the Enlightenment. Voltaire, in his theatrical tragedy, "Le Fanatisme, ou Mahamet le Prophète," portrays a religion which allows the arbitrary use of power. The concept of sexual licentiousness, long pervasive in medieval European diatribes about the prophet, was picked up by Montesquieu as well. Grosrichard contends that this concept of the despotic orient, with its sexual undertones, was a creation of the Enlightenment and was primarily derived from medieval prejudices and the seventeenth century obsession with the Ottoman palace and harem "avec ses amours violentes... ses eunuques et des muets, ses princes aveugles, ses sultanes voilés..."[26] However, Grosrichard suggests that this is perhaps more revealing of western

obsessions than those of the orient: "...là-bas dans l'autre monde, d'où ça me regarde, c'est moi-même, et notre monde, à la fin, que je retrouve."[27] This same point is raised by Hichem Djait and Edward Said.[28] Thus, it is curious that this vision of the oriental despot, which was originally used to denigrate Islam and the Ottomans - and later to justify the imposition of the French Enlightenment in the form of colonialism - should be used by a North African scholar, writing in French, to criticize the Hafsids.

The depiction of bloody power struggles, torture and injustice is not new in Tunisian chronicles, however. The famous nineteenth century Tunisian government official and scholar, Ahmad b. Abî al-Ḍiyâf, in his Ithâf ahl al-zamân bi akhbâr mulûk Tûnis wa ʿahd al-ʿamân, composed in 1278/1862 - 1289/1872, also depicts the Hafsid period in this light. This work, only in manuscript form until 1963, was composed after the manner of Ibn Khaldûn with a long section similar to the Muqaddima where Ibn Abî al-Ḍiyâf develops his ideas on power.[29] Here the proper use of political authority to conserve the umma is a religious obligation. Therefore, the misuse of power is against religion, as well as reason. Injustice, especially abuse of tax collection and repression, are blamed for the dissolution of states. This is a standard interpretation of the role of the state and the proper use of power. In

the Ithâf, the description of the Hafsid period is brief, but in it can be found the same themes as are developed in the theoretical chapters. The abuses of power, execution of learned ʿulamâʾ and over-taxation of the poor are recounted. In this case, al-Mustanṣir is chosen for the epitaph at his death of "fî ʿanqihi, min dimaʾ al-ʿulamâʾ wa amwâl al-fuqarâʾ" (upon his neck were the blood/murder of the ʿulamâʾ and the money of the poor.)[30] Here, Ibn Abî al-Ḍiyâf borrows from the description of the Hafsid period as described by Ibn Khaldûn, whom he praises in his introduction and who was not familiar to Tunisian historians, according to Ahmed Abdesslem, until the end of the 18th century.[31]

Like many other nineteenth century government officials and intellectuals in the Middle East and North Africa, Ibn Abî al-Diyâf was also an admirer of western style constitutional monarchy, and criticized the monopolization of power. The misuse of power and despotism were, for Ibn Abî al-Diyâf, the reason for the current decline of Tunisia -which had begun under the Hafsids.[32] This view, no doubt influenced by Ibn Khaldûn as well, was also similar to ideas expressed by the figures of the French Enlightenment, French government officials, and is still expressed today. The most recent work by a Tunisian scholar on the Hafsids, al-Maṭwî, echoes this sentiment. In his Al-Salṭana al-Ḥafṣîya, the introduction states that

the reason for the Hafsid decline can be traced to the lack of adherence to religious principles and to repressive and unjust rulers.[33] Therefore, the book concentrates on political events and personalities. However, it does not pretend to be a great work of scholarship; instead it is the publication of what were originally a series of radio lectures for the general public and does not add anything new to the subject. Al-Maṭwî does, nevertheless, bemoan the lack of "true" scholarship and sources on the subject.

The major European language work on the Hafsids, and the most extensively quoted today by western and North African scholars, is that of Robert Brunschvig, published in two volumes in 1940 and 1947: La Bérberie Orientale sous les Hafsides: des origines à la fin du XVe siécle. Presenting the most exhaustive use of the primary sources to date, this work has been used by most scholars as the final word on the Hafsid period even though it concludes with the rule of Abû ʿAmr ʿUthmân (1434-94), eighty years short of the end of the Hafsid reign. Julien and Abun Nasr relied heavily on Brunschvig in their surveys of North African history, but curiously, Laroui did not deal with him in his History of the Maghrib which presents so many pointed criticisms of the orientalist/colonialist tradition in the scholarship on North Africa of which Brunschvig was a part as a student and later a professor

at the Université d'Alger.

In terms of its organization, La Bérberie Orientale presents a chronological account of political events in volume one, primarily organized around individual rulers. The rest of volume one is concerned with characterizing the population, divided along the traditional settled/ ḥaḍar and nomadic/badû, Berber and Arab divisions, and the non-Muslim/minority population. The second volume includes the description of institutions: political, economic, social and religious. Thus, the work purports to be a kind of sociological/institutional history which analyzes a historical period according to structures. But, it is most often descriptive rather than analytical, and despite the lack of some of the overt racism evident in French scholarship of the late nineteenth and early twentieth centuries vis-a-vis North Africa, it still has many assumptions which underlie the choice of what to include or exclude and how to do so. These premises are related to familiar themes in French scholarship on North Africa: Eurocentricism, Arab/Berber relations, decline, periodicy, Ibn Khaldûn, and the hegemonic context.

The question Brunschvig sought to answer in his study is how to characterize "dans ses éléments humains essentiels la Berbérie orientale du XIIIe au XVe siècle, sous les Ḥafṣides?"[34] In order to answer this question, Brunschvig first refers back to a much earlier, pre-

Islamic period. It is being a repository for or a connector with the glory of Greek and Roman antiquity that distinguishes Ifrîqîya from the rest of North Africa for Brunschvig. "...N'était-elle pas la terre nord-africaine la plus anciennement, la plus profondément imprégnée d'influence européennes?"[35] The possibility of Roman/European influences, personified as the male Europe and the female North Africa, still being identifiable, except by material remains, five to eight centuries after the conquest by the Arabs is difficult to support with the available evidence. But, it is the Roman/Greek tradition that the title of the book reminds us of as well: La Berbérie orientale, which suggests the history of a "race" of people considered less than civilized by the Greeks and Romans. Why is it necessary to do this? First, for his audience of French orientalists it is pro-forma; and, secondly it supports French/European claims to North Africa as the heirs of the classical tradition.

Moreover, this conception of the superiority of European culture surfaces particularly in the case of the Andalusian influence on the Hafsids. The flood of refugees from Spain in the thirteenth and fifteenth centuries to North Africa resulted in many intellectuals and well-connected families becoming part of the administration in Tunis, Fez, Tlemcen and other major centers. For Brunschvig, the only ameliorating element in an otherwise

dull intellectual and artistic scene during the Hafsid period came from this infusion of Andalusian immigrants. "...La haute qualité des lettrés espagnoles réfugiés en Ifriqiya: la civilisation ibérique, plus raffinée, plus avancées sur bien des points que celle de la Berbérie"[36] brought some light to North African culture until the "Spanish" became "africanisés" and lost their solidarity.[37] The use of the word Spanish is particularly noticeable in those who wish to argue for the continuity of Spanish culture from the Visigothic period through the Islamic to the present without picking up any Arab cultural attributes.[38] Thus, the year 711 and the centuries thereafter are a blip in history. Of course, most of these "Spaniards" were Arab or Berber in origin and could in no way be called Spanish either ethnically or linguistically. And, some of their descendents had lived for six to nine generations in North Africa before the end of the Hafsid period. Yet, the Eurocentric assumptions that only Christian/western soil could produce progress are evident as Brunschvig deals with Andalusis in the Hafsid government and society.

The racist undertones common in Eurocentric scholars are evident in Brunschvig's work in several ways. The first is the issue of black Africans (primarily slaves) who became Muslims, were freed and intermingled with North Africans. Islam is always praised for its ideal of non-

discrimination: "L'Islam d'ailleurs n'enseigne ni ne pratique aucune discrimination à l'en contre des mulâtres, ni des gens de couleur."[39] However, the consequences of this mixture is to raise further doubts in the mind of European scholars such as Brunschvig about the "racial" influence (perhaps a degenerate one?). "Quelles ont été les conséquences physiologiques et culturelles de ce métissage..."[40] And, for many French scholars, North Africa was still part of the Dark Continent and only one step from barbarism.

The next assumption that Brunschvig makes is the existence of a relatively clear division between Arabs and Berbers, where the Arabs are often characterized as rapacious nomads in keeping with the image of the Hilali invasion. "Les Arabes avec les déplacement de leurs troupeaux devastateurs, avec leur goût brutel de rapine, terrifiaient les agriculteurs, les voyageurs, pèlerins, et marchands... ils se mêlaient volontiers de soutenir ou de fomenter des révolutions."[41] The Arabs are associated with the depredations of destructive nomads who either prey upon settled communities or destroy them. This attitude is confused when the issue of Arabisation is raised. Was it a good thing that the Berbers learned Arabic and became Muslim? The sense from many French authors is, perhaps not. The Berbers are also characterized by Brunschvig as primarily settled mountain

peoples or agricultural villagers, ie. they are good and productive. By contrast, the nomadic Arabs are destructive.[42] This closely corresponds to the attitude of Ibn Khaldûn. The Berber/Arab dichotomy is further complicated by the settled/ḥaḍar and nomad/badû divisions. These issues are part of the divide and rule mentality of European colonial scholarship where differences between ethnic/racial groups were emphasized in order to manipulate power.

But, the overarching theme of Brunschvig's work, and of most who have written on the period thereafter, is that of decline. This is evident in La Berbérie in the treatment of the history of the dynasty and the comparison with Europe of the same period. It is stated most succinctly in the article published by Brunschvig in Von Grunebaum's Classicisme et déclin culturel dans l'histoire de l'Islam entitled "Problème de la décadence" where he traces the history of the question "A quoi donc attribuez-vous la décadence, à la fin du moyen âge ou dans les temps modernes des peuples musulmans?"[43] Despite criticizing the treatment of Islamic history by European scholars as being full of generalizations and not objective, Brunschvig suggested that the problem was worthy of study, though with an objectivity and sense of distinction between "retard" and "régression," and between "décadence culturelle" and "décadence politique et militaire."[44] In

fact, the issue of the backwardness of Muslim countries was considered by him to be a study which would contribute to the history of civilization in general.[45] Only one discussant at the conference at which this paper was presented raised the question of how to measure cultural decadence. M. Nyberg asked if it could be determined by the misery of the masses, the depreciation of economic indicators, or the lack of progress in the arts.[46] And, he stated that because Europeans were haunted with the idea of evolution, therefore they sought to measure Islamic culture this way - but perhaps culture should not be studied in this way. The problems raised by his questions were regarded as solvable by applying scientific methods, according to most of the conference's participants. Brunschvig's response was "Il convient de séparer les secteurs, évidement."[47] At which point, Nyberg raised the issue of whether the situation is one of decadence or natural development. No one at the conference seems to have seriously considered the parable of the glass half-empty or half-full, where the interpretation is in the eye of the beholder and not in the thing itself.

Because almost all European scholarship on North Africa from the Enlightenment onwards assumed the backwardness of the Islamic world as a given, no scholar has questioned the interpretation of the Hafsid period as, overall, one of decline (including Laroui). For

Brunschvig, this decline was evident in the lack of artistic achievement of any note, or sophisticated technology, economy, agriculture, military, shipping, or standard of living. "l'Ifrîqiya était à la remorque de l'Europe pour les inventions ou applications matérielles utiles: papier, draps, armes à feu, constructions navales et navigation."[48] Agriculture was behind as well, destroyed by the nomads, or even worse; "une agriculture archaique." So there was no development until the French occupation![49] Commercial enterprises failed because of the Islamic interdiction on usury and interest. Only the Jews and Christians practiced methods complex and advanced enough to augment and increase their commercial activities. (Despite the Christians considering usury a sin.) And finally, life was at best rudimentary and simple.[50] These characterizations are not in keeping with either the accounts of the Catalan and Aragonese merchants, or Arabic sources, which discuss the niceties of commercial enterprises, agricultural production, military methods, and food and housing. The standard of living in Tunis is compared favorably by Catalan merchants with that at home.

The clearest exposition of many of Brunschvig's premises and conclusions is expressed in the last chapter of volume two, where he sums up the pluses and minuses of the Hafsid period. In general, the state was characterized

as weak, which was symbolized by the lack of definite borders.[51] It could, to a certain extent, dispense justice, protect religion, and regulate economic activity. But, "il manquait manifestiment d'initiative, d'esprit de large coordination, de souffle créateur: presque point de travaux publics, intervention insuffisante dans les matières de voirie, rôle économique conservateur et intéressé, nullement animateur ni constructif."[52] The state, often identified with the ruler, suffered this condition because of: the heterogeneity of the army, which was composed of Almohads, Christian mercenaries, black slaves, Andalusians, Berbers and Arab nomads. Secondly, military technology was not as advanced as that of the Christians or Turks. It was rudimentary, despite siege machines and the delayed use of gunpowder weapons. The state also lacked a good navy, even though it had a number of large ships. "Mais en réalité, pour des raisons probablement techniques, les marins d'Ifriqiya n'étaient guère aptes qu'aux razzias côtières ou à la course, si proches de la pirateries qu'ils pratiquaient comme les autres méditerranéens. Ils ne pouvaient interdire aux escadres chrétiennes de débarquer des combattants en Berbérie, ni tenir contre elles en haute mer."[53] However, according to Brunschvig, the navy was sufficient to prevent Christians from reaching the interior of the country.[54] How this would be accomplished is not

specified by Brunschvig, unless he was referring to battles at sea before the Christians ever came close to the shore. Thus, the picture of military and naval technology is contradictory in that it was enough to protect, but not enough to conquer. The strength which held this together was the sultan. And here, Brunschvig expresses admiration for the seriousness and dignity with which the Hafsids ruled (in contrast to the Merinids) without excess or tyranny.[55] Brunschvig also claims that, despite problems, the cohesion of the state lasted three centuries and the people became attached, not to the person of the ruler, but to the dynasty. "La Berbérie orientale d'origine et elle les a regardés pendant longtemps comme sa véritable dynastie nationale."[56]

Among Muslim states, Hafsid Ifrîqîya was a "grande figure" and was an important monarchy, according to Brunschvig, especially when compared to the problems of Muslims in Spain, and the East. It also had good relations with Egypt and Mecca, and some of the Christian states as well.[57] However, the relationship with the southern European states was "...sous une forme presque toujours passive ou defensive de la part de Ifrîqiya ḥafṣide que les contacts se sont multipliés entre elle et les pays chrétiens."[58] As evidence he points to the fact that there were almost no Hafsid consuls in European cities, but there were many European ones in Tunis. Brunshvig

concludes that the Hafsid government did not seek to create for itself relations with the Christian states; usually it was the Christians who initiated the contacts. The only exception he finds was that of al-Mustanṣir, who in 1267, aided Conradin de Hohenstaufen against Charles d'Anjou.[59]

The economy of the Hafsid state resided in a good tax base (even if it overtaxed the people). It is characterized as primarily rural with only some urban sectors. The rural economy rested on agriculture and animal raising. The latter, however, was more prevalent after the Hilali invasion in the eleventh century. There was some hunting and fishing as well.[60] Local industry consisted of the production of olive oil, leather goods, weaving, pottery, dying, glass, soap, candles, wood carving, etc. Yet, Brunschvig was doubtful as to the role of slavery or the amount of progress in urban industries over the period.[61] And, there was no development or progress in agriculture or rural industry except in irrigation (peut être). "Aucun renouvellement ne devait avoir lieu jusqu'à l'occupation française." And, "L'Ifrîqiya était à la remorque de l'Europe pour les inventions ou applications navales et navigation."[62]

What was even worse for Brunschvig was the lack of commercial development. "L'absence presque complète d'évolution était peut-être encore plus sensible dans les

méthodes commerciales dont usaient entre eux les musulmans d'Ifrîqiya."[63] The cause of this poor commercial growth, for Brunschvig, was Islam. "L'interdiction religieuse absolue du prêt à intérêt, même si elle était tournée dans une certaine mesure par des moyens faisant fraude à la loi, était une gêne permanente." The sale of public shares, commenda's and other techniques of cooperative business ventures he said were unknown and barter was common in some areas of the country. "Des méthodes plus complexes ou plus avancées, des innovations tendant à faciliter les transactions ou à en augmenter fortement le volume étaient pratiquées par des Juifs et des Chrétiens, principalement dans le négoce d'outre-mer." [64] Thus, most international trade was in the hands of Christians and Jews and not Muslims.[65] And in terms of exports, he lists raw materials (mostly food), and some manufactured goods such as cloth. He does not explain how the gold trade with sub-Saharan Africa was carried on, which Brunschvig claims existed and was important, with such simple items of trade.

In terms of cultural production in the arts, Brunschvig saw nothing of importance. The art was neither very original, nor very refined.[66] On this note, he concludes that this period was decadent and regressive and that this condition continued until the French took over Tunisia. Therefore, the major problem is to "déterminer

les causes de cette sorte d'arrêt de l'évolution, d'ankylose, qui, en face de peuples au progrès rapide, prend vite un air de décadence et de régression..."[67] Thus, the main thesis of Brunschvig's volumes, besides their descriptive goal, is to chronicle and explain the decline and stagnation which greeted the French colonial enterprize.

While Brunschvig's work is the most directly related to Hafsid "studies," he represents one out of a continuum of scholars, mostly French, who have covered the period in some way or another. Scholars such as Gautier, Georges Marçais, Fisher, Despois, Basset, Barbour, Montagne, Terrasse, Julien, Kress and others have often repeated Brunschvig, Ibn Khaldûn, or each other. The bulk of their work corresponds to the nineteenth and early twentieth century French interest in North African colonies and the development of a Berber policy by the French colonial government in Morocco and Algeria, underpinned by a "mission civilisatrice." Some of these men, such as Montagne, served the French government in North Africa as officials, administrators, or military personnel.[68] Thus, much of the corpus of scholarship is imbued with an attitude of superiority in keeping with French aspirations. This "hubris" was enhanced by the interpretations of French sociologists, anthropologists, and historians who brought to light the inferiority or

primitiveness of North African culture. This set of concepts is evident in European scholarship from at least the eighteenth century.

Perhaps the best analysis to date on the subject of eighteenth century European views on North Africa is Ann Thomson's book, Barbary and Enlightenment: European Attitudes towards the Maghreb in the 18th century. Here, she postulates that the eighteenth century view was altogether different from the nineteenth, so much so that a kind of "collective amnesia" had set in by the nineteenth century which allowed French writers to act as if the past history of North Africa, though well known in the eighteenth century, was uncharted territory by the nineteenth.[69] "What had been a familiar part of the Mediterranean world, comprised of states with which long-standing relations existed, became a primitive and frightening African wilderness peopled by wild barbarians."[70]

This change is especially evident, as Thomson's examples show, when the connotation of the word Barbary/Barbarie, a common term used in the eighteenth century for the Maghrib, is traced. In the eighteenth century, many European writers viewed the term in a positive light and, in fact, claimed, along with Langier de Tassy, that some Europeans were more ignorant and "sauvages" than the people of Barbary.[71] A Russian naval

officer, M. G. Kokovtsov, wrote in 1776 that "The name of Barbarian only suits a ferocious, lawless and cruel people, but the Barbaresques seem to me in general to have mild manners..."[72] These more innocuous associations are quite different from the negative connotation found in Gibbon's work on the rise and fall of the Roman Empire where he concludes that the term Barbary had "justly settled as a local denomination"[73] in North Africa. One of Thomson's explanations is the changing attitudes towards the Turks who controlled most of North Africa. This seems an unlikely explanation for a phenomenon which may have been evident in some eighteenth century authors, but certainly Montesquieu and Voltaire expressed a negative view of Arab culture in the same century as well.

Another lightning rod for criticism in the nineteenth and twentieth century has been Islam. Thomson attributes much of the negativity to Enlightenment secularists and the endemic problems of Mediterranean piracy which resulted in the enslavement or capture of many Christians. A particulary virulent, anti-Muslim organization was the Pères Rédempteurs who "were concerned to present North Africans in the worst possible light in order to arouse their readers' sympathies and to raise money to buy back the captives..."[74] Others characterized the Muslims as fanatical, aggressive, ignorant and superstitious.[75] By the twentieth century, Islam has come to be considered as

one of the forces holding back the Middle East from full participation in the modern world.

It was the French conquest of Algeria, and later Morocco and Tunisia, which finally necessitated the placement of North Africa as part of the "Dark Continent, wild, backward, and unknown."[76] No longer was North Africa part of even the "civilized" tradition of Islamic culture, such as it was. This attitude was influenced, in the course of the nineteenth century, by Social Darwinism whose concept of the evolutionary scale of cultures was applied by Europeans to peoples and cultures around the world. White Europeans were the superior race in this system of classification, and the Arabs and Berbers in North Africa could only hope to approach this status by learning French, becoming Christian and adopting western values and culture.

These attitudes, so clearly presented in Thomson's book, though perhaps not so convincingly explained in the historical context, have been evident in one form or another in work on the Hafsids, in particular, and North Africa, in general, until the present. Brunschvig was more subtle than his contemporaries in displaying many of these assumptions. However, Eurocentrism, racial or geographic determinism, denigration of Islam, and other themes are common in much of the work on the Maghrib by European scholars, primarily the French; and they have crept into

Maghribi scholarship as well. Abdallah Laroui, in his brilliant critique of the historiography of the Maghrib, stated that "In countless instances, an author, in order to support a daring conclusion, refers the reader in a note to a work that is itself hypothetical in the highest degree: the prehistorians refer the reader to the medievalists, the authors of modern history to the historians of antiquity, and vice versa ad infinitum."[77] Often, the cross referencing results in a misuse of evidence as material from an earlier century is used to prove a point in a later time or the opposite.[78]

One common thread is the concept of progress, or the lack of it, in the case of North Africa. Europe is assumed by European scholars to be modern, progressive, rational and civilized. And, any precursor of this civilization, such as the ancient Greeks and Romans, is seen as part of this continuum. Despite the existence of these two civilizations in North Africa in Antiquity, the Maghrib is not seen as taking a place on this line of progression because it took a detour by way of Islam and Arab civilization. This linear logic of progress is part of the heritage from the French philosophes, despite the tongue-in-cheek conclusion of Voltaire's Candide and the criticism which Rousseau levied at the western institution of property. It is also explicit in the age of western imperialism and the ideologies of Marxism and capitalism

with their assuredness of the superiority of their answers to the human condition.

North Africa, for most European scholars, did not partake of these progressive, rational attributes of the West. This view is stated succinctly in Gautier's 1927 work: L'Islamisation de l'Afrique du Nord: les siècles obscurs du Maghreb, where he states "Quel abîme entre la Cartage punique et la romaine! entre l'Afrique romaine et le Maghreb musulman: entre lui et l'Afrique francaise! Tout change d'un coup, langue, religion, concepts politiques et sociaux. C'est une histoire hachér de compures qui semblent totales et sectionnée en compartiments qui, semblent étanches. Dans nos pays européen, il y a une évolution progressive, suivant une courbe continue, au Maghreb, une série de mutations sudaines."[79] Here the history of the Maghrib is pictured as disjointed, without continuity, and what is even worse, not evolving. This characterization is followed by most historians who treat each Maghribi "dynasty" as an entity discontinuous from that preceding or following it. Thus, Almoravids, Almohads, Hafsids, and Merinids are seen as units with little connection to each other, except in conflict and disjointed from the geographic environment of Africa or the Near East. For Gautier, the Maghrib is like an island a "vase close," a hodge-podge or "tohu-bohu" of events "sans queue ni tête."[80]

One of the major questions in Maghribi history has been how to explain this disjointed history with its lack of progress, if not even decline. One answer has been geography. It is the climate, location and "soil" which have caused states to act like "champignon qui pousse en une nuit et moisit en une matinée."[81] Of course, it was this same soil which produced the greatness of the Punic civilization and the granaries of the Roman Empire. This fact leads Gautier, Marçais, Despois and others to blame the Arabs, Berbers and Turks for the neglect of the soil which reduced agricultural production. This leads logically enough to the conclusion that under the French this could be remedied. "On ne veut pas dire que l'Afrique du Nord soit pauvre irrémédiablement. L'Algérie, en ce moment précis traverse une période de grande prospérité."[82] Georges Marçais in Les Arabes en Berbérie du XIe au XIVe siècle, which was published in Algeria in 1913 by the Société Archéologique du Departement de Constantine with M.M. Lutard, the governor general of Algeria, as its honorary president, also expresses this need for French leadership. Marçais states that North Africa is incapable of progressing by its own and needs the direction of an outside force.[83] So, it must be forced, if need be, by the French, to transform - grow grapes (produce wine[84]), and then it would lose its "visage de tristess et de pauvreté" as Despois

characterizes it in his La Tunisie orientale.[85]

Along with geographic determinism, lack of European-style progress is explained by these authors in racial terms. Despite his claims of rejecting the racial inferiority thesis through his description of North Africans as a racial mix,[86] Gautier has only negative comments about the Berbers and Arabs. They possessed "n'a aucune individualité positive."[87] Moreover, the Berbers were positively "barbaric," without a script or organized language. And, then, they had been completely eviscerated of their positive characteristics by the Arabization of the Maghrib; and, therefore, the French, if they could find the real Berbers, could make a viable state out of them.[88] Thus, it is the Arabs who ruined the Berbers and who were the real "barbare."[89] It was the history of the Arabs in North Africa which has as its central rational "...par quel enchaînement de fiascos particuliers s'est affirmé le fiasco total."[90]

One of these fiascos is the Hilali invasion in the eleventh century, which is linked to the deterioration of the Maghrib as a whole, despite evidence that state fragmentation and agricultural problems had ensued at an earlier date.[91] Marçais spends the last fifty pages of Les Arabes en Berbérie criticizing the Hilali Arabs who destroyed agriculture and "industry" and, in fact, precipitated the ruin in the eleventh century of the

prosperity established by the Carthaginians and Romans in the BC era. They were, for Marçais, "...le principe toxique..."[92], and for Gautier, a virus which had to be treated.[93] Despois compares the Hilali Arabs to the Huns or Tamerlane. But, what really irked Despois is that they annexed a land that was Romanized and Christianized![94] The condition of Ifriqiya, disordered and nomadized by the Hilali invasion, is blamed for the difficulties faced by the "Berber" Hafsids from the thirteenth century on. This controversy continued to rage for many years.[95] However, the anti-Arab sentiment evident in much of the French literature had its purpose for the colonizer. It could be used to divide the Berbers from the Arabs by destroying their pride in the Arabic language and Islam, and hopefully to instil an admiration for the French language and culture. To a great extent they succeeded. Even today, French is the language of the elite in Tunisia and the main mode of communication in schools and the government; and grapes/wine are a source of considerable export revenue for Tunisia and Algeria.

As can be seen, explaining the decline of North African civilization under the Arabs has been a preoccupation of historians. And, it is not just a question raised in regard to the Hafsid period, but others as well. The downfall of the Muwahhidûn, which allowed the rise of the Hafsids has been given similar explanations to

the ones so far encountered here. Some, like Julien, have suggested that the Berbers were incapable of moving from an ethnic group to a state, and therefore, the Muwahhid movement was destined to fail.[96] Abun-Nasr has proposed that the destruction of the state was due to the nomadic Zenata expanding into the fertile plains of Morocco and western Algeria, a later influence of the Hilali invasion.[97] Le Tourneau has cited several other causes. First, he blamed al-Ma'mûn for destroying the Muwahhid movement by basing it on a hereditary monarchy after the death of Ibn Tûmart.[98] And second, the introduction of Arab nomads into Morocco for use as mercenaries caused tension between the nomads, agriculturalists, and the original Muwahhid supporters which ultimately undermined the unity of the state.[99] Finally, Le Tourneau based the decline of the Muwahhids on their reliance on a small elite which could only rule by forcing the population into submission.[100] These explanations, however, do not take into account other conditions in the Mediterranean, such as the increasing control by Christian states, such as the Genoese, Venetians, and Pisans over Mediterranean trade. Nor, do they consider population decline in the Magrib in the early thirteenth century brought about by famines, epidemics and warfare.[101] But, perhaps the most significant event for the fortunes of the Muwahhids were the changes in trans-Saharan trade and the loss of control

over the desert "port" of Sijilmâsa, the western gate to the gold trade.[102] However, the symbolic event marking the decline of the state was when al-Ma'mûn renounced the Muwahhid doctrine in 1229. Many of the Muwahhid shaykhs were imprisoned and killed and members of al-Ma'mûn's family were put in positions of authority. This policy was accompanied by an increased willingness to grant European requests for increased religious and political freedom for Christians within Muwahhid lands. This set of affairs was later reversed by his son under pressure from the Muwahhid shaykhs; but, by this time the Hafsids had already declared themselves the ideological successors of the Muwahhids.

The issue of periodicy in North African history is raised by Brunschvig and others who have chosen to term the period of control of Ifrîqîya by the Hafsid family as the Hafsid period. The identifying factor is thus the lineage of the rulers rather than their ideology, the delineating factor in titling Almoravid and Almohad periods. Yet, a case could be made for considering the Hafsid period as merely the Muwahhids under a new ruling family and transferred to a new location. The ancestor of the rulers of the independent Hafsid state, Abû Ḥafṣ ʿUmar b. Yaḥya al-Hintâtî was one of the original "Ten," the companions of Ibn Tûmart. He played an important role in the election after Ibn Tûmart's death and was active in

many military expeditions. As a mark of his abilities, he was the commander of the Hintâta forces, the only Muwahhid shaykh to be granted the right to lead his own people.[103] His descendants served in the government and in Andalus and Ifrîqîya. One of these, ʿAbd al-Wâḥid b. Abî Ḥafṣ was appointed governor of Ifrîqîya in 1206.[104] And, when in 626/1229, al-Ma'mûn abolished the Muwahhid doctrine and ceased to recite the khuṭba in the name of the Mahdî, Ibn Tûmart, another descendant of Abû Ḥafs, Abû Zakarîyâ' Yaḥya declared his independence. The name of al-Ma'mûn was omitted from the khuṭba in Tunis, and the name of the Mahdî, Ibn Tûmart was retained.[105] In the thirteenth century, the Hafsids built a mosque named after the Muwahhids, and in a treaty with a Christian power, they called themselves Muwahhids. Under his rule, Muwahhids, principally Hintâtâ, were employed in government positions and the Muwahhid ideology was maintained. Muwahhid institutions and the use of the name of the Mahdî, Ibn Tûmart, in the khuṭba, continued well into the fifteenth century in the Hafsid state. At the beginning of the sixteenth century, Leo Africanus still described the ten principal officers at the court of the king of Tunis as Almohads.[106] Thus, it might be important to consider the issue of continuity and change when examining this period, and to ask whether ideology, family or other factors should be used to characterize the Hafsids. In fact,

perhaps we should call them Muwahhids.

If the issue of Muwahhid ideology raises the question of continuity, the problem of Andalusian immigration raises the specter of influence. For some scholars, like Brunschvig, and Kress, the Andalusian immigration to North Africa, from the thirteenth century on, is what created the only ameliorating or progressive influence in the Hafsid state. The "Spanish" Andalusians created whatever there was of brilliance in the arts, and government according to Brunschvig. For Kress, in his article published in IBLA in 1980, "Éléments structuraux "Andalous" dans la genese de la géographie culturelle de la Tunisie," it was Andalusian immigrants from the thirteenth through the seventeenth centuries who formed the agriculture, arts/crafts and industry of Tunisia from the Hafsid period until the French. Andalusians are credited by Kress with bringing an agricultural revolution to Tunisia through the introduction of new plants, modern irrigation, and other production techniques. Rice was reintroduced; certain species of olives (superior ones), pomegranates, apricots, almonds, and various flowering plants were brought as well. The excellent wine, silk, fruits and vegetables of Tunisia were attributed to Andalusian influence.[107] In fact, he claims the first grape vines were introduced by them too. The list goes on to include bee hives, domesticated rabbits, tuna fishing,

falconry, cheese making, sausages, two-wheeled carts, windmills, and watermills. On the latter, Kress wonders if the Moriscos perhaps passed by Holland on their way to Tunis![108] The techniques for producing cotton cloth, brocades, perfumes, certain fabrics, glazed ceramic tiles in specific colors, the urban grid pattern plazas, paved roads, underground sewage systems, and public baths were also Andalusian inventions.[109] "Grâce aux activités andalouses de la vie professionnelle le commerce extérieur connut un essor phénoménal; les juifs andalous surtout y occupérent des positions clés."[110] So, for Kress, it is not just Andalusians, but non-Muslim Andalusians who are responsible for this amazing transformation. This list should be suspect, merely by the fact that many of these concepts or elements existed before the Hafsid period. Gabes silk and public baths were well known before the thirteenth century, to name just two items. The Geniza documents from the eleventh century attest to the fame of this silk. Grapes, or at least raisins, from Ifrîqîya were also known in Geniza times.[111] The objections could be continued, but it soon becomes evident that Kress abhorred the idea of attributing any product of great value to Arab or Berber invention.

Latham, in his study of Andalusian immigration to North Africa suggests that, despite their numbers, it is difficult to determine the amount of influence Andalusians

really exercized in Ifrîqîya.[112] Abun-Nasr has claimed that the "exclusiveness of the Almohads as an aristocratic class contributed towards encouraging large numbers of Andalusian immigrants to settle in Zayanid rather than Hafsid territory,"[113] thus minimizing their influence. However, Ibn Khaldûn, Brunschvig and Latham have all stressed the role of the Andalusians in the Hafsid state. Ibn Khaldûn mentions that Andalusian exiles such as the Banû Sa'îd from Granada were entrusted with financial affairs such as taxes and finances.[114] Latham suggests that the use of Andalusian calligraphic style in administrative documents and the use of Andalusian bookkeeping methods are also indicative of the great influence of these people in the Hafsid government.[115] Yet, it is Laroui who suggests that the politics of fourteenth century Ifrîqîya had its sources in Andalusia, with commercial and political ties that crossed the sea from Tunis to the Iberian peninsula. And that Andalusians, increasingly appointed to government office under the Ḥafṣids by the fourteenth century, played an important role in "laicizing" power and offsetting the monopoly of the Muwahhid elite.[116] These individuals, of whom Ibn Khaldûn is an example, travelled from place to place, offering their services to those who could provide them with wealth or security. They were used by rulers such as the Hafsids to check the power of other groups in their

domains and to deal with foreigners. This introduced a constant state of tension which resulted in jealousies, rivalries and intrigues. Essentially they were an alien influence which was both a stabilizing and destabilizing force.

It is much more revealing to place these individuals in relationship to the power structure in North Africa, and to see them as part of a network of cultural and economic relationships tying the Andalusians to Europe and various states in North Africa than it is to see them as the introducers of everything of value in technology or the arts. In this, contextual identity can be seen to be an important factor in Hafsid history. However, when do these identities cease to be of value in analyzing trends or events? Is an Andalusian of Berber or Arab ancestry always operating as an outsider in Ifrîqîya? Or do they become absorbed into their constituent groups as time passes?

This final question is of importance both as it relates to the success of the early Hafsids and the problems they faced toward the end from struggles between conflicting interest groups. Abû Zakarîyâ', the first independent Hafsid ruler, followed a policy calculated to co-opt or destroy conflicting interest groups and to build a financial empire based on trade. Many government posts were given to Muwahhids, but Andalusians were appointed as

well. In an effort to counter the influence of the Hilali tribes, primarily the Dawadida, he favored the expansion of the Sulaymid tribes to the south east, also an important region to control for trans-Saharan trade. He suppressed those tribes which rebelled and granted land on the edges of his territory to those who supported him, thus creating buffer zones. He had both Arabs and Berbers in his military forces; and later Hafsids employed Christian mercenaries and black slaves as well. Treaties were made with various European states such as Venice (1231), Pisa (1234) and Genoa (1236). These treaties insured the reciprocal security of navigation and the establishment of consuls in Tunis among other issues. This ability to force or co-opt various groups diminished by the end of the fifteenth century, according to Brunschvig and Laroui, as power was distributed between competing groups on the basis of necessity.

The various groups within the Hafsid domains and government reduced its efficiency and the funds available to support and protect the state. The military became unstable, with black slaves, Andalusians, Christian mercenaries, Turks, Berbers, and Arabs competing for positions. The number of troops fluctuated from season to season as soldiers returned to their flocks and crops. Leaders would abandon the field if the battle was going poorly. Equipment was often lacking and ships were

supplied by private individuals or rented from other states, rather than owned by the government. This picture, painted by Brunschvig, is however, no different than that of the Crown of Aragon or other European states of the early Renaissance period. Nor, is it that different from the conditions facing the Hafsids in the thirteenth and fourteenth century, when they were stronger. So, the question of explaining the decline of the Hafsids surfaces again in the guise of ethnic conflict which affected the military.

The omnipresent issue of decline colors the way in which Islam is treated in the secondary sources as well. Islam, particularly Mâlikî Islam, is blamed for the decline of the Maghrib by scholars such as Julien, called a "liberal" by Edmund Burke III. For Julien, "Malikism stifled intellectual effort and religious feeling" because it "ruled out allegorical interpretation of the Koran and any personal inquiry into the meaning of the law by reference to the sources."[117] This issue is taken up by the thesis of S. Ghrab on Ibn ʿArafa and Mâlikî thought in North Africa.[118]

To understand the Hafsid period it is necessary to place Ifrîqîya within the context of a set of multi-stranded relationships. The position of the Hafsid state on the shores of North Africa, across the shipping lane of Sicily and Italy; on the way to Egypt and the Iberian

Peninsula; at the terminus for Saharan trade from both the central Sudan and the West means that it should not be easily discounted as a player in the Mediterranean and Saharan economic scene. Tunis was a much sought after post for Catalan merchant/consuls, and Italian businessmen, and missionaries or priests sent by the Pope. And, just as these Christian Europeans had their representatives in the Hafsid cities, so too did the Hafsids have their representatives in the Saharan "camel ports" leading to the gold and slave trade of the south. Travelers on the Hajj; merchants trading with the East, South, North or West; Sufi's and scholars passing to Damascus or Cairo; Crusaders; pirates; armies and political leaders all passed through Tunis, Bijâya, Beja, Sfax, Jerba, or other urban centers controlled by the Hafsids. This milieu of constant flux and grabbing for the golden opportunity must be studied without the assumptions of rise and fall, decadence and strife. Many historians now claim the Roman empire never fell but was merely transformed into the Byzantine empire and the Catholic church, thus stressing continuity and change of institutions - rather than looking for the reasons for decline they search for hints of transformation. The Hafsid period needs to be regarded in this light as the dark shadow of past conceptions of Maghribi history are examined and illuminated.

Fighting over the dead body of the past is a

preoccupation of those living in the present as they attempt to shape the future. In this sense, the scholarship on the Hafsid period reflects the context and conceptions of historians as much as it does the events of the past. No one can entirely surmount this problem, even if they wished to do so. Thus, it behooves the researcher to be aware of these "biases" and to study them on their own terms. In the case of the history of the Hafsids, many of the preconceptions and interpretations of the period by modern scholars have been colored not only by their times and the incestuousness of secondary sources, but by the primary sources as well. The prejudices and limits of the argument about decline can be traced to sources within the Hafsid period, such as Ibn Khaldûn, al-Tijânî, Ibn Qunfudh, and others. The assumptions and arguments imbedded in these writings must be examined as part of historiography as well as evidence, or else the limitations of their visions will determine ours.

It is not possible to examine all of these issues presented here. They lead down too many divergent paths. However, as will become evident in the following chapters, changes in the economic sector during the Hafsid period had a profound effect on their policies and the stability of the state. Since Antiquity, Ifrîqîya had produced agricultural surpluses which were exported throughout the Mediterranean. And, during the Islamic period, Saharan

trade fed the coffers of rulers and merchants. By the Hafsid period, this economic pattern had changed. Agricultural production had declined; pastoralism had increased; and, much of the Saharan trade had turned west. The Hafsid government had to concentrate on different sectors of the economy, such as becoming brokers in a Mediterranean trade where an export in commodities such as wheat or oil from Ifrîqîya no longer played a major role.

1.A. Giddens, The Constitution of Society (Cambridge: Polity Press, 1984), 237.

2.The geographical designation is not completely satisfying here. Arab sources call the region the Maghrib, and for this period it is often termed Ifrîqiya. However, the Hafsids ruled over an region roughly covering what is modern day Tunisia, and sometimes western Libya and eastern Algeria.

3.Ibn Khaldûn, Al-ʿIbar, 6:595; Histoire des Berberes et des dynasties musulmanes. vol. 2 (trans. de Slane), 300. Zarkashî, Dawlatayn, 17-24/30-44 (1895). Ibn Qunfudh, Fârisîyya, 109 (Ar)/ Journal Asiatique, (1848-52), 310-22. Ibn al-Shammaʿ, Al-Adilla (1936 ed.)

4.Ibn Khaldûn, Al-ʿIbar, 602; Les Berberes, vol.2, 346-7. Tijânî, Riḥla, 111. Tijânî mentions that the king of Kanem captured and executed an enemy of al-Mustanṣir as well.

5.al-Fârisîyya, (1968 ed.), 120.

6.Ferid Ben Sliman, "Despotisme et violence sous les Hafsides," IBLA (1991), t. 54 no. 168, 255.

7.Brunschvig, La Berbérie, vol.2,445.

8.ibid., 442.

9.Abdallah Laroui, The History of the Maghrib: An Interpretive Essay, (trans. Ralph Manheim) (Princeton: Princeton U. Press, 1977) 214.

10.A. Louis, "Contacts entre culture "berbère" et culture arabe dans le sud tunisien," Actes du Premier Congrès d'Etudes des Cultures Mediterréennes d'influence Arabo-Berbère (Alger: 1973), 394-405.

11.M. Redjala, "Ibn Khaldûn devant la torture et la mort violent," Revue de l'occident musulmane et de la Mediterranée, 40 (1985), 2è semestre, 158.

12.ibid., 158. Citing Ibn Khaldûn, Les Berbères, vol. 2., 351-2.

13.Jamil M. Abun Nasr, A History of the Maghrib in the Islamic Period (Cambridge: Cambridge U. Press, 1987), 122. The demands made by French merchants to al-Mustanṣir to repay them for "loans" they made to al-Lulyânî is considered by some historians to be one of the factors which influenced Louis IX to launch a crusade against

Tunis in 1270.

14.Ibn Khaldûn, Al-'Ibar, 6:692; Les Berbères II. 392. Abû Bakr Ibn al-Ḥasan Ibn Khaldûn was arrested, tortured and executed by Ibn Abî 'Imâra when he briefly took Tunis in 1283. Tunis was retaken by the Hafsids in 1284.

15.Redjala, op. cit., 162.

16.Ben Sliman, op. cit., 255.

17.ibid., 260.

18.Ibid, 255.

19.Ibid, 257. Alain Grosrichard, Structure du sérail: la fiction du despotisme asiatique dans l'occident classique (Paris: Seuil, 1979), 92.

20.Ben Sliman, op. cit., 258-61.

21.Abun Nasr, op. cit., 124.

22.Ben Sliman, op. cit., 260.

23.Grosrichard, op. cit., 12.

24.ibid. 16.

25.Ibid., 34.

26.Ibid., 31.

27.Ibid., 33.

28.Hichem Djait, Europe and Islam, trans. Peter Heinegg, (Berkeley: University of California Press, 1985). Edward Said, Orientalism (New York: Vintage Books, 1978).

29.Ahmed Abdesselem, Les historiens Tunisiens des XVIIe, XVIIIe et XIXe siècles: essai d'histoire culturelle (Paris: Librairie C. Klincksieck, 1973), 371-75. Abdesselem presents an overview of the general themes in the writings of this author.

30.Ibn Abî al-Ḍiyâf, Ithâf ahl al-zamân bi akhbâr mulûk Tûnis wa 'ahd al-'amân vol. I, (Tunis, 1971), 163. Also, vol. I, 155 where he describes the ascension to power of Abû Zakarîya in 634-5/1237 using the same term as Zarkashî, which is repeated by Ben Sliman: "wa istabaddu bi Ifrîqîya mustaqillan" (He took possession of Ifrîqîya

independently/ ruled over it despotically).

31.Abdesselem, op. cit., 464.

32.Ibid., 374-76 for comments.

33.Al-Maṭwî, Al-Sulṭanah al-ḥafṣiyyah: târîkhuha al-siyâsî wa dawruh fî al-maghrib al-islâmî,(Beirut: Dâr al-gharb al-islâmî, 1986).

34.Brunschvig, vol. II, 417.

35.Brunschvig, vol. I, (1940), 2.

36.Ibid., vol. II, 156.

37.Ibid., vol. II. 157.

38.Americo Castro, España en su historia (Buenos Aires: 1948). See also, Cl. Sanchez Albornoz, España un enigma historico (Buenos Aires: 1956).

39.Brunschvig, Vol.II, 158.

40.Ibid.

41.Ibid., 420.

42.Ibid., 423.

43.Brunschvig, "Problème de la décadence" in Actes du Symposium International d'histoire de la civilisation musulmane, Classicisme et déclin culturel dans l'histoire de l'Islam (Paris: Librairie G. P. Maisonneuve, 1957), 34.

44.Ibid., 41.

45.Ibid., 43.

46.Ibid.,48-9.

47.Ibid., 50.

48.Brunschvig, vol. II, 437. All notes in endnotes 46 to 64 come from the same volume.

49. 436.

50. 438.

51. 423.

52. 423.

53. 425.

54. 427.

55. 425.

56. 428.

57. 429.

58. 430.

59. 430.

60. 435.

61. 436,7.

62. 436,7.

63. 437.

64. 438.

65. 431.

66. 445.

67. 445.

68. Robert Montagne, The Berbers: Their Social and Political Organization. Trans. Seddon (London: Frank Cass, 1973), xiii.

69. Ann Thomson, Barbary and Enlightenment: European Attitudes Towards the Maghrib in the 18th Century, (Leiden: E.J. Brill, 1987), 2.

70. Ibid., 2.

71. Ibid., 14.

72. Ibid., 15

73. Ibid., 14.

74. Ibid., 19.

75. Ibid., 20.

76.Ibid., 143.

77.Laroui, 3.

78.For example, see the work of S. M. Imam al-Din on the economic history of Muslim Spain where he jumps across centuries and the completely unfootnoted work of M. Lombard on the North African gold trade. "L'or musulman du VIIe au XIe siecles" Annales: Economies, Societes, Civilisations. vol. II (April/June, 1947) 143-60.

79.Gautier, L'Islamisation de l'Afrique du Nord: Les siècles obscurs du Maghreb (Paris: Payot, 1927), 15. See also Le passé de l'Afrique du Nord: les siècles obscurs, (Paris: Payot, 1937), 31.

80.Gautier, op.cit., 223.

81.Ibid., 12

82.Ibid., 15.

83.Marçais, George, Les arabes en Berbérie du xie au xive siécle: Recueil des notices et memoires de la société archeologique du département de Constantine vol. 4, ser. 5, vol. 47 (Constantine: Imprimerie d. Braham, 1913), 1, where he states: "Le Berbérie ne paraît pas capable de progresser par ses propres moyens; elle doit se mettre à la remorque d'autrui...Réçevoir de forces sans cohésion, elle a besoin de recevoir ses influences directrices de dehors, de Phénicie ou de Rome... Et quelle vigueur elle montre dans sa réaction contre le progrès imposé!"

84.Gautier, L'Islamisation, 15. "Elle la doit à la vigne."

85.Despois, La Tunisie orientale: sahel et basse-steppe: étude géographique (Paris: Presses Universitaires de France, 1955), 595.

86.Ibid., 24.

87.Ibid., 25.

88.Ibid.

89.Gautier, Le Passé, 60.

90.Gautier, L'Islamisation, 27.

91.See Hady Roger Idris on the Zirids. La Berbérie orientale sous les Zîrîdes xe - xiie siècles (Paris: Adrien-Maisonneuve, 1962) vol. 1 & 2.

92.Marçais, Les Arabes..., 734.

93.Gautier, Islamisation, 11.

94.Despois, La Tunisie, 157, 172.

95.See Edmund Burke III, "Towards a History of the Maghrib," Middle Eastern Studies (Oct. 1975, vol.11, no. 3), 317.

96.Charles Andre Julien, History of North Africa, trans. John Petrie, (New York: Praeger Pub., 1970). (French edition, 1952). 340.

97.Jamil Abun-Nasr, op. cit., 101.

98.Roger Le Tourneau, The Almohad Movement in North Africa, (Princeton: Princeton U. Press, 1969), 105.

99.Ibid., 79.

100.Ibid., 107.

101.See Ahmed Khaneboubi, Les Premiers sultans merinides 1269-1331: histoire politique et sociale (Paris: Éditions l'Harmattan, 1987), 28-31.

102.See Laroui on other problems such as the conflict between the Almohad ideology of consultative government and the autocratic monarchy of the state. 192, 193. Also see for Sijilmasa - Abun Nasr, 104.

103.Brunschvig, vol.I, 24.

104.Ibid., 13.

105.See al-Tijanî, Riḥla (1958), 360-62; Ibn Khaldûn, Berberes, II, 220-22.

106.Jean-Leon L'Africain (Leo Africanus), Description de l'Afrique edit. Epaulard, (Paris: Adrien-Maisonneuve, 1956) vol. II, 386-7.

107.H.-J Kress, 16-21.

108.Ibid., 24.

109.Ibid., 24-30.

110.Ibid., 30.

111.Goitein, see vol. 4.

112.John D. Latham, "Towards a Study of Andalusian Immigration and its Place in Tunisian History." Les Cahiers de Tunisie, vol. V (1957), 205.

113.Abun-Nasr, op. cit., 149.

114.Ibn Khaldûn, Muqaddimma, vol.2, 24.

115.Latham, op. cit., 218, 220.

116.Laroui, op. cit., 213.

117.Burke, op. cit., 317.

118.S. Ghrab. His thesis is mentioned by Mohamed Yalaoui in his article "Les recherches sur la Tunisie médiévale au cours des trente dernières années," IBLA, 50 (1987), 71. Supposedly it has been already published, but there is no library in the United States which possesses a copy.

CHAPTER 2

ZAYTUN

Ifrîqîya fî waqt al-Rûm

"Just like life itself, history seems to us to be a fleeting spectacle, always in movement, made up of a web of problems meshed inextricably together, and able to assume a hundred different and contradictory aspects in turn....There is no unilateral history. No one thing is exclusively dominant..."[1]

Ifrîqîya, on the southern shores of the Mediterranean and the northern limits of the Sahara, has two faces, one directed out across a sea of water and the other a sea of sand. This is illustrated quite clearly in medieval maps such as those of al-Idrîsî (548/1154) and the Catalan Abraham Cresques (1375) where the Maghrib is squeezed between two long bands, one of blue and one of tan.[2] Both acted as barriers as well as conduits for travel and trade. Ifrîqîya, with its various urban centers under the Romans: Leptis Magna, Sabratha, Carthago, Utica, Hippo Regius, Caesarea; and later, in the Islamic period: Barqa, Sirt, Tripoli, Gabes, Sfax, Tunis, Bona, and Bijâya

was especially well placed to take advantage of sea, sand, and fertile plains. The several millennia before the advent of the Hafsids in the thirteenth century are marked by the ruins of fortified settlements, aqueducts, roads, places of worship, homes and burial sites for those long gone. The long tradition of agriculture, pastoralism, industry, and trade which developed during these years faced the Hafsids on their ascension to power and formed the physical and cultural framework for the economy of the territory during their three hundred year rule.

Essential characteristics of the economy of Ifrîqîya are evident from a study of patterns of production and exchange in the region during Antiquity. The wealth of the region was first and foremost derived from the production and export of olive oil and the sowing of wheat and other grains. Secondarily, there was a large sector devoted to the raising of animals, and the production and export of leather and hides. These two sectors were compatible as long as they did not compete for space. Therefore, it was necessary that land and water rights were regulated. Surpluses for exchange also existed only in so far as peace reigned, agricultural production was encouraged, and the population was not too large for the economic base to support. The third aspect of the economy was the production of ceramic wares and cloth. Pottery production was essential for the shipment of olive oil, honey, and

other goods. In this way it was an important factor in the success of an export trade in these commodities to other parts of the Mediterranean. Fine wares were also produced for tableware and decorative pieces; and were an important item purchased by the elite or exported. These three sectors of the economy combined to produce an active commercial scene in Ifrîqîya which continued well into the Islamic era, at which point the trans-Saharan trade in slaves and gold passing through Ifrîqîya became an essential factor in the success of a sequence of Islamic states. This trade in gold was also important for Ifrîqîya under the Romans by the fifth century A.D. However, because the history of the Maghrib as interpreted by scholars has often been one of discontinuity between the Islamic period and Antiquity, and one of progressive decline, there has been little effort to trace the development of these economic sectors and the mechanisms which made them possible.

The condition of the physical environment and economy in the Islamic period and antiquity in the Maghrib has led to much debate amongst historians. Nowhere is this more true than in the subjects of agriculture and trade. The apparent discrepancy between the lush landscape of antiquity and the dismal one on the eve of French control led to much controversy over the nature of the natural environment historically. The conception of Tunisia as the

bread basket of the Roman Empire led French colonial authorities to dream of restoring North Africa to the lush landscape of the Roman period. Archeological and historical evidence pointed to large scale farming in the pre-desert and more fertile coastal plains in antiquity. Inscriptions and artifacts along desert routes suggested a Roman presence along caravan trails, leading to much speculation about Saharan trade with Ifrîqîya in antiquity. And, during the early Islamic period, the fabled gold trade of the Moors attracted the attention of romantically, as well as practically, minded scholars.

The perception that North Africa was a veritable jungle in Roman times was supported by the archeological and literary evidence of numerous species of animals common to warm, humid environments: elephants, hippopotami, giraffe, and lions. The contrast between past and present "was regarded by early investigators as prima facie proof of decisive climatic change marked primarily by an overall fall in the level of precipitation."[3] For many scholars, such as Carton in his 1894 article on climate and agriculture, and Lavauden on the Saharan forests in 1927, the contrast between the North Africa of the Roman empire, "the granary," and that of their own time was ample proof of progressive environmental deterioration caused by desiccation due to a decline in precipitation.[4] Some scholars even assumed that the

prosperity and wealth of the Roman period could not be achieved in the present because the climate did not permit it. According to Laroui, this question was in "vogue until the eve of the Second World War," and "specialists are no longer interested;" however, the issue did not die with Gsell's hypothesis that there had been little climatic change since antiquity.[5] It is still of concern to archaeologists, historical geologists and palaeobiologists.[6] Others scholars have rallied to the invasion theory to explain environmental deterioration. This was extended by the French colonial scholars to a general theory of "decline" which encompassed all spheres: political, economic, and cultural. This became the North African "myth."

Brent Shaw, in a recent article on the role of climate in North African history, argues that the climatic "myth" was "developed on the basis of false assumptions about the past, dubious literary evidence, and misunderstood archeological data."[7] He rejects the traditional arguments based on "fauna, water resources and control systems, and the production of grain surpluses" in favor of geological and biological evidence; and concludes that climatic conditions in the Roman period were similar to today.[8] The marked difference in fauna, forest cover, and tilled land between today and the Roman period he attributes to man. Based on travellers accounts of the

eighteenth and nineteenth century, he argues that wild animals were hunted to extinction between the Roman period and the early "colons;" lions and ostrich were found in large numbers in the 1800's, to such an extent that colonial authorities were planning ostrich eradication programs. The hippo and elephant were hunted out during Roman times.[9] Despois, in his 1940 book, La Tunisie Orientale, had already reached a similar conclusion: "la disparation de l'éléphant coincide avec le progrès du peuplement à l'époque romaine."[10] Shaw argues that the area and productivity of tilled land did not change as much as the population it was intended to feed. It was low population levels in the past which left surpluses available for export; whereas, control of the best land during the colonial period created artificial surpluses to export "in the face of local starvation."[11] The most significant finding in Shaw's article relates to the difference between the medieval and the Roman period. Geological studies done in the 1960's and 70's discovered layers of sedimentary deposition which were post-Roman, with dates from 1000/1100 AD to 1750. These sediments suggest that there was either more rainfall, leading to more erosion and deposition, than during the Roman or modern eras; or that declines in cultivation might have left the land more vulnerable to natural forces. This would suggest that "Roman achievements ...took place under

climatic conditions that were more like those of the present than those of medieval times;"[12] and, that the medieval period was different from the Roman either in precipitation or land under cultivation. However, this avenue of research has yet to be followed up by historians.

Archaeological studies recently undertaken by the Libyan Valleys Project, seem to conclude, almost unanimously, that climatic change on a long term scale, did not occur from the Roman period to the present. There may have been short fluctuations which caused droughts in some years, but a steady decline in precipitation is not evident in changes in soil layers or plant remains in predesert and coastal areas.[13] A study of the more fertile northern coast and mountains of Ifrîqîya shows that factors other than climate probably played a role in agricultural changes from antiquity to the present. A recent book on Roman imperial estates in the Bagradas (Medjerda) valley in Africa Proconsularis makes the point that the supply and control of manpower to run the estates and work the land was ultimately impossible for the Roman central government to accomplish. So, labor shortages contributed to the decline of production as central control grew weaker. Another study by Marizot on olive cultivation in the Aures mountains confirms that it was not climatic change from antiquity, but rather changes in

consumption, trade routes and population transfers which affected olive cultivation only as recently as the eighteenth century.[14] Until there is more research directed at historical geology, botany, and zoology, there is not enough evidence to conclude definitively that a change in precipitation patterns did not play a role in North Africa, but the evidence to date seems to indicate that it did not. Perhaps it is time to put this "myth" to rest.

Another explanation given by French scholars of the nineteenth and twentieth centuries for environmental deterioration was what B.D. Shaw called the "invasion myth:" "colonial historians postulated the destructive forces of the Vandal invasion of the fifth century, and the Arab invasions of the seventh and eleventh centuries, as the critical causal factors in the collapse."[15] The invasion thesis has long served the interests of those who wanted to colonize or marginalize Maghribi society by determining that it has never been a nation, or a state, but always under the rule of an outside empire.[16] The colonial authorities could comfortably assert that only under the Romans had the Maghrib produced and that the Maghribis needed strong direction to reach similar achievements again. Yves Lacoste reminded his colleagues in 1966 that this vision was historically inaccurate; that Maghribis had ruled themselves at least from the eighth

through the sixteenth century if not longer in the far west. "The eternally conquered people once ruled both Spain and Egypt."[17] Moreover, more recent scholarship has shown that "the period of Vandal rule and the first Arab raids did not perceptibly alter the fabric of ancient North African society."[18] Susan Raven in Rome in Africa states quite clearly the current consensus: "The Vandals did not come to destroy, but to settle....(and) had no wish to cut down the olive trees or burn down the vines that were the basis of the prosperity they had every intention of enjoying themselves."[19] The Arab invasions in the seventh century also did not occasion widespread destruction of agriculture. The work of Mahmud Abuswa and ʿAbdulwâḥid Ṭâha on the Arab conquest of North Africa shows quite clearly that the Arabs were interested in awarding their followers the best land, not destroying it.[20] Accounts of early Muslim travellers and geographers, such as al-Tijânî in the fourteenth century, praised the extensive olive groves in Ifrîqîya. He states that around Gabes, many of the olive trees had been cut down in earlier invasions, but they had been replanted![21] And Shaw shows that grain surpluses have been produced in North Africa from pre-Roman times until the present. The Hilali invasion of the eleventh century has also been discounted as a cause of decline. H.R. Idris related decline in the eleventh century to the collapse of the

Fatimid state in Ifrîqîya.[22] Michael Brett characterized this period as a process of increased independence for individual "city states" in Ifrîqîya, diversification of markets which may have weakened the overall economy of Ifrîqîya, and steady attacks by the Normans along the coast. But, except for Tripolitania, where the Hilali Arabs settled, Brett is hesitant to call this a period of decline, much less attribute the problems of Ifrîqîya to the invaders.[23]

Underlying the invasion thesis has been the problem of the "nomad menace." In each instance, first the Arabs in the seventh century, and then again in the eleventh - the demise of wealth and prosperity has been blamed on nomad invaders. Lacoste, in a chapter from his book on Ibn Khaldûn entitled "The Myth of the Arab Invasion," and Shaw in an article entitled "Fear and Loathing: the Nomad Menace and Roman Africa" both point out many of the fallacies upon which this picture of destructive "hordes" has been based.[24] Part of the debate over the role of nomads in the history of the Maghrib has been fueled by ignorance, and part by long held assumptions. There has been little research on the nature of pastoral or nomadic societies in North Africa. There are no chapters on pastoral peoples in the economic histories of the region in antiquity; no study of Berber or Arab nomadic peoples in the medieval period; and, few studies of nomads in the

colonial period which are not rife with negative caricatures. "No matter how important the nomad has been thought in causing catastrophic changes in history, with few exceptions, the historical study of pastoralists has remained, like the nomad himself, peripheral and subliminal." Scholars describe them as "hostile," "dangerous," "rootless," "unpredictable," and a "primitive human type."[25] Shaw contends that the evidence from the Roman period demonstrates that pastoral nomads were actually in a symbiotic relationship with the settled peoples of the region, supplying goods (animals and their by-products: wool, leather, hides; cloth and produce from oases: dates, figs, alum) and services (labor during harvest and sowing; and, military or administrative functions). In fact, Roman authorities did not treat them harshly but attempted to accomodate and use them.[26] Lacoste argues that it was not the nomads who were destructive, but the ruling Maghribi elites who tried to use them to fight their enemies. So, there was no antipathy between village and nomad; they actually cooperated. However, despite the numerous articles discounting the interpretations of the Hilali invasion, and the work of Shaw and Lacoste, a year after Shaw published his article and three years after he presented his research - the well known "ignotus" that Shaw refers to in his article had not changed his mind. In 1975 W. H.

C. Frend wrote: "The nomads...represented a complete break with settled Romano-African civilization that had survived both Vandal occupation and native Berber razzias..., their objectives were plunder and pasturage... they were a major threat to ordered life in North Africa..."[27] In 1983, he stated: "By c. 700, North Africa had turned its back... on seven centuries of history, to become semi-desert territory dominated by transhumants and nomads...the raids of Berber and Arab nomads gradually made settled life impossible..."[28]

So what does this reveal about climate change or depredation by invaders as causes for a general malaise in the Maghrib? Very little. First, neither seem to be a sufficient explanation. Climatic change does not seem to have occurred. Ground water supplies also seem to have shown no conclusive signs of drying up. Many cisterns and wells constructed during the Roman period are in use today.[29] There is evidence from aerial surveys and the Libyan Valleys project that "the desert periphery of the Maghrib, and some regions of the semi-arid zone, have suffered irreparable ecological damage in historical times."[30] Some of these regions show evidence of cultivation far beyond what is current today in southern Tunisia, Algeria and Libya. However, invaders seem to have either maintained existing agricultural systems, destroyed and then rebuilt old ones, or introduced new

land use patterns. Second, there may have been no long term decline in agriculture. We do not have enough data to measure it in terms of surplus production, except to say that Ifrîqîya has always exported grain, even before the Romans. Olive oil has also continued to be produced and exported. Third, can productivity, stability, or "success" be measured just in terms of agriculture? What about access and control of markets? There are long-term land-use patterns and fluctuations in them in Ifrîqîya, as will be discussed later in this chapter. The overall effect, long term, was to produce a more sedentary urbanized society; but this was not an uninterrupted process.

Even more than climate and agriculture, the discussion of Saharan trade has led to literally hundreds of articles, each with its own scenario. Maghribi, or African, trade in the Mediterranean has, in contrast, been almost totally neglected. Gold from mines south of the Sahara, wending its way across barren wastes and into the coffers of North African rulers was sufficient for Gsell (1926) to explain the prosperity of Leptis, and Lombard (1947) to explain the wealth of the Almoravids.[31] Charles-Picard (1961) suggested that the gold mines of Senegal were already famous in the time of King Solomon.[32] Law (1967) claimed that the Carthaginians traded in African gold, either by sea or by land.[33] Most historians, however, have no idea how much gold was

traded, nor when the trade started. Claude Cahen even went so far as to call the story of the fabulous gold trade before the eleventh century a "myth."[34] Others have changed their opinions as to when this trade commenced from year to year. Timothy Garrard, in his 1980 book on the Akan gold trade, claimed "It is not known exactly when the trans-Saharan gold trade began." But in 1982, on the basis of metrology, he dates it to the end of the third century A.D. [35] Evidently, the evidence is difficult to interpret and evaluate.

Along with the problem of assessment, there has been a neglect of other aspects of the economy of North Africa due to a concentration on gold and other luxury items. The economy of the pre-modern Maghrib was based on agriculture, pastoralism, and craft industries, as well as trade. The Carthaginians obtained their wealth from the transport of items by sea and agriculture. Roman North Africa became wealthy from olive oil and wheat. The Islamic Maghrib produced agricultural and pastoral products, and manufactured fabrics, clothing, pottery, and items of leather and metal - along with acting as middlemen in Mediterranean and Saharan trade. If the discussion is concentrated on gold, it is seemingly easy to explain the demise of independent North African states and to undermine indigenous production. Also, it is not just the gold carried across the Sahara which is

important. It is the effect of trans-Saharan trade on the economy, politics, and cultures of both sides of the desert which is the real issue. What was brought south to exchange for the gold, slaves, ivory, or other items brought north? What quantities were involved? What percentage of the economy was linked to this trade? What effect did the exchange have on culture, or language? These questions are not easy to answer. This chapter will trace some of the threads and attempt to answer some of the questions related to agriculture, industry, and trade in the pre-Islamic period. And, the following chapter will trace similar developments in the Pre-Hafsid period.

AGRICULTURE AND LAND USE IN ANTIQUITY

Land and climate

The term Ifrîqîya, used in early Arab geographers' accounts, comprised roughly the territory from the Jabal Nafûsa, east of Tripoli, to Bijaya in the northwest. This is much larger than the Africa Proconsularis of the Romans, which included only what is the northern portion of Tunisia today. Ifrîqîya of the Islamic period included Roman Tripolitania, Byzacena, Africa Proconsularis, Numidia, and parts of Mauritania Sitifensis. Depending on

the time period, it is either used as a geographical designation or a political entity. Ibn ʿAbd al-Ḥakam in his Kitâb futûḥ Miṣr places Ifrîqîya as nine days march from Tripoli,[36] with the seat of government at Kartago. But throughout his text, the terms Maghrib and Ifrîqîya are often used interchangeably.[37] Al-Masʿûdî's (d.345/956) famous Murûj al-dhahab wa maʿâdin al-jawhar includes Ifrîqîya as a portion of the Maghrib, however he is not specific as to its limits.[38] Al-Bakrî (d.487/1094) in his Kitâb al-masâlik wa al-mamâlik mentions the territory of Ifrîqîya as having a length stretching from Barqa on the east to Ṭanja on the west, and it's width from the sea to the sand until the first land of the Sudan.[39] Al-Idrîsî (548/1154 completed book p.103) places Ifrîqîya in the second section of the third "clime," roughly Barqa to somewhere between Bijaya and Constantine. Ibn Saʿîd al-Gharnâṭî (b. 605/1208 or 610) divides the Maghrib into three regions with Ifrîqîya commencing in the Jabal Nafûsa and including Tripoli, Sfax, Tunis, Bijaya, and Alger.[40] Abû al-Fidâ' (1273-1331) divides the Maghrib (which for him stretches from the borders of Egypt to the far west) into three parts. Ifrîqîya starts with the mamlaka of Bijaya (Bougie) and continues until Barqa (Barca) and the borders of Egypt.[41] Al-ʿUmarî (b. 700/1301) calls Ifrîqîya iqlîm (area or district/ province), and includes the territories from Barqa to

Tadlis (the start of the Maghrib al-awsaṭ), with its southern border the Sahara.[42] Finally, Leo Africanus calls it the kingdom of Bougie and Tunis, clearly delineating the borders of Hafsid control. The usual designation in al-Bakrî or Ibn Ḥawqal for people from this area is either their tribal name or Afâriq. Curiously, the lands to the south were all termed the Sudan, the current usage of Africa not existing in medieval geographers' accounts. The borders of Ifrîqîya were elastic, fitting the contingencies of rulers and writers.

The topography and climate of this region have a wide range from high mountains to low plains, and humid coastal regions to dry desert. The northern coastal region stretching from Tunis westward has a wet Mediterranean climate with rainfall in the range of 400mm to more than 1000mm yearly, most of it occurring in the winter. This is an region of typical mediterranean vegetation: fruit trees, vegetables, flowers and herbs. The coastal region to the east receives less than 400mm on the average and is part of a long climatic belt which continues along a high plateau from eastern Ifrîqîya to the Atlantic coast. This plateau is primarily a pastoral region. However, the plain from Tunis south, called the Sahil, has a mild climate, moderate rainfall and fertile soil, making it an important agricultural region. South of this is a desert belt which continues to the south of the Sahara. But even this region

has numbers of oases, some large and supporting palm groves - and others just watering spots. Their existence has meant that the desert belt has always been inhabited by nomadic herdsmen, traders and villagers. The coastal zones are flanked by high mountains in the north. The Kabylia ranges between Alger and Constantine reach altitudes of more than 1000 meters above sea level. And the High Tell and Dorsale ranges in Tunisia are between 200 to 1000 meters. Often the rainfall is higher here than in the plateau regions with good grazing and pockets of good soil which can be utilized with the use of terracing. However, the damp weather does not neccessarily mean the mountains are favorable for agriculture. The plateaus and plains, with the use of irrigation, have proved to be more fertile regions. The Jabal Nafûsa west of Tripoli and al-Jabal al-Akhḍar west of Barqa serve as rain-catchers for the immediate surrounding areas and raise the average rainfall from the near desert norm for the Libyan coastal zone. The high plateaus of Ifrîqîya are separated from the Sahara by another series of mountain ranges: the Saharan Atlas to the west (Awlad Na'il and Jabal ʿAmur) and the Awras in the east, with its highest peak at 2,329 m, gradually descending into the Dorsale range. However, the low coastal plain along Tripoli and Sfax passes between the Jabal Nafûsa and high plateaus south of Gafsa to the Shaṭṭ al-Jarîd and on to the Sahara. All these regions are

dotted with villages and urban centers and criss-crossed with roads and camel paths. This land of contrasts is characterized by mixed land use patterns with agriculture along the coast and mountains, and animal raising in the plateaus and pre-desert.

Since most of Ifrîqîya has marginal or intermittent rainfall, except for some pockets along the northern coast and mountains, the raising of crops and animals relies on learning to manage or exploit scarce water resources. The climate and topography of Ifrîqîya require different techniques of water and soil management than other areas of the Mediterranean. "Depending on where the hypothetical southern boundaries of the Maghrib as a whole are to be drawn, between two-thirds and three-quarters of the total land area requires a special water technology to achieve agricultural production."[43] This technology must deal with periods of draught, heavy or intermittent rainfall, flash flooding, and silt build-up in the semi-arid plains and hills south of the northern Tell and mountain regions. Dry farming techniques of controlling and conserving run-off from streams and rains through the use of earthen terraces, multiple-tiered cropping, and flood-zone systems of embankments and levees developed in the pre-desert and more arid mountains and plains. Alternative forms of irrigation farming developed in coastal zones; and more northern regions in Ifrîqîya.

Archaeological finds have shown that agriculture and water control systems existed in North Africa in the prehistoric period. Barker and Jones in the Libyan Valleys Survey Report for 1979-81 indicated an early date for water control technology in the pre-desert in Tripolitania. They found that "some walls, particularly in plateau depressions away from the wadis, have been found to contain flint artifacts which typologically are late prehistoric; in some wadi systems there are refurbished or additional walls which could well be Islamic or later... Hence the technology of wall building to control water and soil is probably of great antiquity...perhaps for three or four thousand years."[44] The coasts and plains were probably more settled than the marginal regions to the south, but research is still sketchy, at best, and theories abound as to the nature of agricultural and urban organization in these regions. Archaeologists have discovered evidence of hydraulic systems and a simple wood plow in use well before the Phoenicians introduced one made of iron.[45] Camps has concluded that the Maghribi plough was of local origin since it differed from other ploughs in use in the Mediterranean.[46] Botanists have established the existence of wheat, barley, beans, and chickpeas. However, most historians attribute the introduction of the olive to the Phoenicians.[47] By the time of the Carthaginians the inhabitants of the region

were known to be organized under "kings" ruling from inland urban centers such as Thugga (Dougga), and Cirta (Constantine). Susan Raven characterizes these people as a combination of agriculturalists and transhumant nomads. She suggests that the mobile existence of the nomads and their need for vast "amorphic" territories often clashed with the settled farmers. And thus, she postulates a "perennial friction between 'the desert and the sown'" as an explanation of the "many revolts, uprisings, and rebellions which punctuated North African history."[48] This convenient explanation forgets that often the "sown" is tied in a symbiotic relationship to pastoral life, each relying on the other or being part of a whole way of life where pastoralists sow crops and farmers raise animals.

Shaw surmised, in his article on water and irrigation that "agriculture appears to be a well established part of the African economy at least by the fifth century B.C., and not a product of superior Roman technology and civilization even in regions well beyond the Punic pale." Roman agronomists were used to coping with "heavy soils, and ridding the land of an excess of water,"[49] and not with the reverse condition which they faced in most of North Africa. In fact, many of their efforts to build large-scale dams in the wadis in Tripolitania to control water sources failed due to flash-flooding or changes in water courses and were abandoned for the earthen dikes

employed by indigenous farmers.[50] However, for years, scholars accepted "without question" that "Roman intervention and improvement of exploitative techniques practiced in the African countryside"[51] were responsible for turning North Africa into a highly productive territory which supplied the Roman market with grain and oil. This meant that remains of hydraulic systems turned up by archaeologists in Tripolitania or around Qayrawân were attributed to the Romans rather than indigenous builders. Shaw's article, clearly outlines the assumptions of scholars and colonial officials which colored their perceptions of the North African past. Researchers assumed that only a centralized and sophisticated governmental authority could design and manage uniform and widescale irrigation and water management schemes. In an effort to return the countryside back to an imagined Roman "paradise," numerous surveys of ancient hydraulic systems were undertaken which charted and mapped "countless wells, cisterns, storage basins, and aqueducts ..."[52] In an effort to find what was Roman, they overlooked evidence to the contrary. The distinction between urban hydraulic schemes which were often monumental feats of engineering and were meant to supply the consumptive needs of urban households, markets and government installations (and were often the product of centralized governments); and rural or agricultural (productive) schemes which, in North

Africa, were often no more than earthen dikes and canals to channel the run-off of streams or rain into fields and holding basins was not made. Shaw cites several examples where researchers were led astray. In the pre-desert region of Tripolitania, water control schemes were probably pre-Roman[53]; those near Qayrawân were Hafsid;[54] and "extensive terrace schemes in the J. Usselat district of northeastern Tunisia ... are now known to be of more recent origin and were not abandoned until the mid-eighteenth century A.D."[55] Thus, both pre- and post-Roman water schemes were neglected by researchers, giving a "false reading" as to traditional patterns of water and land exploitation. Based on data from texts, such as Pliny, Heroditus, Agennius Urbicus, and Procopius; and, analysis of archaeological and historical evidence Shaw reached the conclusion that it was these pre-Roman techniques, and their organization, maintenance, and exploitation under the Romans which produced surpluses to be shipped to Rome. These surpluses were a "defining characteristic of arid-zone irrigation and water-control schemes;"[56] and not a Roman invention.

ROMAN TRIPOLITANIA/EASTERN IFRIQIYA

Pre-desert[57]

The pre-desert plateaus and plains, which characterize much of southeastern Ifrîqîya (Roman Tripolitania) are hot and dry, with rainfall between 200 to 25mm annually (5 to 10 inches).[58] The rainfall also increases in variability the further inland from the coast. It can fall in sudden showers, causing floods and washing out dams and bridges, and changing the course of wadis as it deposits several meters of water. Most of the rainfall is in the early fall or late winter. Water can only be acquired for drinking by digging wells to depths only reached with modern technology or by constructing cisterns to collect surface runoff near the wadis.

Given the environment, this region seems most suited to semi-nomadic subsistence patterns. These kinds of systems, according to anthropological studies of the region, would probably have consisted of herding of sheep, goats, and perhaps camels; and cultivation of the wadi floors. Cultivation would only be possible after the fall rains and would be scattered in several different wadis by cultivators to minimize the risk of loss. Animals would be moved south in the winter and north in the summer to take advantage of scarce water resources.[59] This system of

pastoralism and cultivation seems to have been practiced as early as the pre-Roman era in Tripolitania. However, the gsur (qsûr) complexes of the Romano-Libyan era attest to a much more sedentarized population and larger agricultural surpluses than even exist in this region today.

The explorer Barth was one of the first Europeans to "describe systematically the frequent stone 'castles' on the wadi edges, often associated with evidence of cultivation in the form of 'broad and firmly constructed dikes...built of stones' running across the narrower tributary wadis at frequent intervals"[60] in southern Libya. These gsur are also referred to in early Arab accounts such as that of al-Ya'qûbî and al-Bakrî. The archaeologist, Richard Goodchild first dated these structures to after the early third century A.D. Severan forts of Bu Njem and Gheriat el-Gharbia.[61] Olwen Brogan, who worked for years at Ghirza, dated farms in the area to the later first or second century.[62] Brogan and Smith, her collaborator, attribute the development of agriculture in the pre-desert near Ghirza to Punic influence.[63] They found no definitive evidence as to their first construction of gsur, but evidence from the Ghirza gsur indicate construction from the first to the fifth century A.D. The status of these gsur is alluded to in the law of Honorius in 409 A.D. where he refers to lands in Africa

which have been conceded since antiquity to the barbarians [gentiles] "in consideration of the care and maintenance of the frontier and its fortifications."[64] St. Augustine mentions the role of gentiles in late fourth century Tripolitania in conjunction with the watching of crops and as porters.[65] According to the Ghirza study, inscriptions on some of the gsur indicate that they were "erected by landlords to guard their estates." Gsur of this type are to be found in Tripolitania in Ghirza, and Matmata.[66] But whether these fourth and fifth century constructions were built by Romans or gentiles is not always clear. The UNESCO Libyan Valleys Survey, however, has dealt with these areas in more detail and attempted to construct a picture of pre-historic and Romano-Libyan settlement and agriculture. From their work, there is evidence of a settlement hierarchy, dependent on the gsur comprised of "major and minor farms and farmsteads and their associated cemetaries between one to two kilometers lying along either side of wadis."[67] Inscriptions attest individuals with Libyan names living on large farms and being buried in fine mausolea. This indicates that many of these communities were composed of rural (tribal?) aristocracy.[68] These gsur are basically "fortified structures with a gateway and internal courtyard surrounded by living and storage rooms."[69] They served as "storehouses for olives, oil, possibly wine, grain and

above all fodder." They were distribution points for produce and gathering points for labor and water. Barker and Jones envisioned the gsur as central points in the economy of the region from which products were sent to coastal markets or to the south, and wealth was accumulated from the profits of these sales. Some gsur are large enough to be termed 'courtyard farms' by the archaeologists. These are composed of enclosures defined by a wall several meters high with several entrances. Within this enclosure are rooms or smaller enclosures built against the wall of the larger structure. The average size of these is 1500 sq. meters. Some of them contain olive presses. The olive farms show evidence of occupation starting in the late first century. Within the immediate area of the gsur lie small buildings, perhaps dwellings, in various shapes. A variety of funerary monuments of a temple or obelisk shape, not associated with Roman artifacts, are also connected with the sites. Small dwellings and enclosures, termed farmsteads by the team, are scattered along the stretches of wadis. A final type of habitation was positioned on hilltops and seems to represent villages overlooking wadi areas. Over 2,000 of these sites were identified in the area of the survey by 1981. A tentative chronology for these structures was developed extending from the first to the fifth centuries A.D. The open farm is more prevalent on first century

sites; the gsur belongs to the second century. Barker and Jones suggest that increasing government involvement in protecting the settlements occurred in the late first century, especially during the Flavian period. Mattingly also argues for a first century date for farm settlement based on the dating of the control of the Garamantes to that period, thus allowing for investment in olive plantations in the pre-desert. However, he thought it most likely that pre-Flavian settlements would have been those perched on hills, not directly related to wadi agriculture.[70] Conversely, Barker and Jones argue that upheavals in the third century also contributed to the construction of numerous gsur for protection. Remnants of gsur in the Wadi Merdum area in Tripolitania can be dated to the ninth/tenth century A.D.; and that at Ben Telis - to the fifteenth century, thus attesting to viability and use of this system well into the Islamic era.[71]

An elaborate water control system was developed by the inhabitants of these wadi regions. Numerous rubble walls, dating from the prehistoric period to the present, can be found stretched "across the wadi floor, along the wadi edges, and to a lesser extent on the plateau above the wadis, designed to channel water into cisterns or down to the wadi floors, or to trap both water and soil."[72] Some walls have prehistoric flints associated with them, but the majority are linked by Barker and Jones to the

Romano-Libyan period based on the Roman pottery in the wall-fill and the "coherent plan, and uniform construction."[73] The purpose of the walls was to channel rainfall from a large 'catchment' area down to the wadi floor, and to slow down the passage of the water on the way by a series of cross walls to catch silt and water. The water was guided by slanted channels so that it gradually entered the wadi every 100 meters, or it was channelled into cisterns. Sluices or additional earthen walls could control the amount of water delivered to each field or cistern. More walls were built in the wadi to divide up land. Often these systems were located at the confluence of more than one wadi and would gather the rainwater flow from areas up to twelve times that of the wadi fields, sometimes irrigating 70 hectares. Thus, the system could increase the amount of water several times over the annual rainfall amount. In addition, the systems were characterized by "careful soil selection,...built to divert water away from as well as into the fields,...and widescale water storage in cisterns."[74] In fact, the soils in the area of the Libyan Valleys Survey are some the most potentially fertile ("chestnut" types) in the Mediterranean. This soil type is found in the coastal zone from Sirte (Surt) to Sousse (Sûs), the most prolific olive growing region for the Romans.

A mixed economy with a wide range of crops

characterized the pre-desert zone. From the remnants of olive presses,[75] to mausolea relief carvings from the Ghirza tombs,[76] and the samples of plants, animals and food remains from the Libyan Valleys Survey, a picture of the pre-desert agricultural activity emerges. Barley, wheat, olives, grapes, figs, almonds, dates, field peas, lentils, pulses, watermelon, and wild plants were raised and consumed in the area. The likelihood of imports is low given the remains of olive/grape presses, chaff and threshing remains found at the sites. A variety of animals were also raised or hunted: sheep and goats were the most common, then horses, cattle, pigs, camels, cats, dogs, rabbits and gazelle.[77]

The purpose of the camel in this region, according to Bulliet in his book The Camel and the Wheel, was in agriculture. He refers to several stone reliefs found in western Tripolitania dating from the late second to early third century A.D. depicting camels pulling plows.[78] This use of camel in agriculture is also mentioned for the Islamic period by Ibn Khaldûn who refers to Arabs using the camel for plowing in Tripolitania.[79] Bulliet concludes that the farmers of Roman Tripolitania "were the first plow-using people in North Africa to come into contact with camels as they made their appearance" from the south.[80] Camels were also used to pull carts as a list of tolls from the first half of the fourth century

attests.[81]

Olive production was common in the northern wadis, with loamier soils and heavier rainfall than the stock-raising south. "The level of production in the pre-desert is a delicate problem of interpretation. On one hand, the existence of extensive settled farming in the marginal zone appears to break all the rules of agricultural feasibility and viability...;" however, the evidence of the Libyan Valleys Survey shows that many landowners became wealthy from this agricultural system.[82] Evidence of imported African Red Slip ware pottery (produced in Tunisia), large scale oil production (in the thousands of liters), and monumental tombs costing tens of thousands of denarii attest to commercial activity which made local elites wealthy.[83] Some of these goods may have been traded with local Roman garrisons, but it has been argued by Mattingly that these did not appear in eastern Tripolitania until the third century, and in the west they may not have existed until the second century A.D.;[84] so the impetus for agricultural production and the wealth derived from it cannot be linked to local trade only. Barker and Jones in their 1979-81 survey make a rough estimate at levels of productivity by looking at the size of field systems, water capacities of cisterns, and size of cemeteries and settlements. They estimate that a holding of fifty hectares could have produced an annual

surplus of several thousand liters of oil and fifty lambs.[85]

Agriculture and the production of olive oil seems to have been fairly constant throughout the second and third centuries. On the basis of pottery remains, Dore, a specialist in ceramic archaeology, postulates that the second century was the period of maximum prosperity, and that by the end of the fourth century economic activity was slowing. By the sixth century "the pre-desert beyond the gebel has slipped quietly out of history's gaze."[86] Archeological studies, however, do not present a clear cut picture of the situation in North Africa in antiquity. Data from the UNESCO Libyan Valleys survey and excavations from Sabratha, Lepcis Magna, Surt and other sites reported in Libyan Studies show, at least in the case of Tripolitania, eastern Ifrîqîya, varying dates and probable causes of declines, some only temporary. The Libyan Valleys Survey report for 1979-81 suggests that the pre-desert region of Tripolitania was characterized by "semi-nomadic pastoralism and patch cultivation, associated with low density populations" in the late prehistoric and Islamic period; whereas, in the Romano-Libyan period it was more densely populated and had more intensive agricultural systems than exist today.[87] However, they were unable to conclude whether this agricultural system represented Roman colonists or local Libyans; nor were

they certain as to the causes or timing of its demise. Several hypotheses have been advanced by archaeologists to account for the decline of agriculture in this region: 1)climatic change,[88] 2)"economic collapse of the markets supplied by the agricultural communities in the pre-desert,"3) changes in economic, fiscal or taxation policies,[89] 4)tribal movements or the Islamic invasion,[90] 5)changes in the natural environment due to agricultural exploitation: salinisation or soil erosion,[91] 6) overpopulation. The conclusions of the 1980 Libyan Valleys survey of pottery shards led the archaeologists to state that "It has become accepted thinking that the decline of this (the wadi control system) and the Roman farming system coincided with the end of the Roman era. In our survey area, however, the chronological evidence argues against such an interpretation." Decline, instead, occurred within the Roman period, in the third century A.D.[92] The 1979-81 report suggests that "...the collapse of intensive farming was certainly related to social and political changes on the coast...the internal social pressures of high population exacerbated by the impact of the agricultural system on what was essentially an unstable environment."[93] Evidence was found of soil erosion during the Roman period, possibly caused by overgrazing of grasslands. Intensive farming and irrigation in the pre-desert could not be continued as

soil erosion occurred, and population pressure and political changes took place.[94] The Sabratha and Valleys survey report for 1988 indicates that the second century A.D. was marked by the height of agricultural prosperity in the region which appears to decline by the fourth century.[95] An earthquake in 365 A.D. seems to have affected the urban centers of Tripolitania: Lepcis Magna, Sabratha, Cyrene, etc. All the cities were reconstructed, but on a much smaller scale.[96] Thus, these studies conclude that agricultural decline in the pre-desert initially was evident in the Roman period. It was affected by political policy changes by the central Roman government, high population, overgrazing, earthquakes, and military operations; but not climate.

However, there has not been enough study and analysis done to definitively date agricultural development and decline in the pre-desert, or determine their causes. In the Tripolitanian pre-desert, many of the gsur date from the post Romano-Libyan to the Islamic period and not just the first through fourth century date commonly accepted. And, some date to earlier periods. Pottery found at the site of a gsur near Wadi Mimoun suggest a late fifth to post Roman date.[97] The Ghirza studies have turned up numerous Islamic period pottery shards and evidence of trading activities at the site in the tenth/eleventh centuries.[98] Al-Bakrî, too, mentions

Ghirza and Wadi Mimoun in his account of the territories between Tripoli and Waddan on the desert route as a place inhabited by Berbers; but, he does not mention whether they are agriculturalists.[99] By the time of Ibn Khaldûn, this region and its adjacent coast is passed by with a mere mention as once having populous villages and now being a desert.[100] The evidence, as much as there is, from this region shows that significant agricultural development occurred in the Tripolitania pre-desert in antiquity and that its slow demise was not caused by climate, but by man. The chronology of this process is still unclear, but it probably commenced before its incorporation into Roman territories and continued well into the Islamic period. This is significant because it demonstrates a pattern of communal and agricultural organization in the pre-desert from late prehistoric times to the Islamic period. Unfortunately, the viability of this system into the Islamic era has not been adequately studied by archaeologists.

Jabal and coast

Much of the best agricultural land in Tripolitania can be found in the mountain foothills and plateaus in the Gebel (Jabal), "a series of linked ranges which run from the Chott Djerid to the sea at Lepcis Magna"[101]. Its

development is linked to the development of the coast. Mattingly suggests on the basis of Flavian milestones, inscriptions from Lepcis, military road construction, land dispute wars, and other evidence that the Gebel were already producing large quantities of olive oil and were well developed agriculturally before the first century A.D.[102] However, archaeological digs in this area have not progressed as far as those in the pre-desert.

Because rainfall in the Gebel and coastal regions is highly variable from year to year, careful management of water resources is necessary in this region as well. Rainfall has been recorded at a high of 510mm to a low of 63.5 mm; and, some years only attained 10% of their yearly averages. The coastal region from Tripoli to Sirte receives more rainfall, but, that to the north- from Tripoli to Sousse is part of the same climatic belt as the Gebel. So, in many ways, there are problems similar to those faced in the pre-desert; and similar solutions evolved. Water diversion walls, terraces and dams were also used in this region to control water flow and conserve moisture. Similar techniques are still in use in southern Tunisia and the Jabal Nafûsa region today.[103]

The Gebel farm sites, many of them fortified, produced a variety of crops. Literary sources, such as Apuleius, attest to the raising of animals, cereals, vines and olives. Mosaics from villas point to the production of

tree crops and legumes. And the remains of numerous olive presses indicate a large-scale production of olive oil. Some sites in the Gebel Tarhuna "were equipped with several presses and some huge oil 'factories' are known with upwards of nine presses."[104] It may be an exaggeration to term these installations factories, but the quantities of oil produced and the amount of labor involved must have necessitated some kind of production system. There are also indications of pottery production in the Gebel, such as the site at Ain Scersciara near Tarhuna. There, archaeologists found several kilns and numerous pottery shards. One of the kilns measured six meters in diameter, one of the largest Roman period kilns discovered in this region.[105] Other pottery production sites have been discovered in Tripolitania near Tripoli, at the head of the Wadi Giabrun es-Seghir, and outside of Tazzoli (the latter two sites are both in the Gebel region). From the remains of thick-necked amphorae shards on the sites, Goodchild postulated a late third century date.[106] It is also likely that these sites provided pottery to transport oil. Shards of this amphora type have been found in the pre-desert zone of the Libyan Valleys Survey, near Sabratha, Ostia, and at other sites in the central and eastern Mediterranean. The evidence from these finds has suggested that export of this pottery began at the end of the first century AD, reaching its height in

the second and third centuries.[107] Pottery imports from production sites in Tunisia have been discovered at sites in Tripolitania. African Red Slip Ware from Tunisia and some amphora from the Sahel region, primarily dating before the third century AD, occur in the Valleys Survey region.[108] They are later replaced by local production.

The Gebel were economically linked with the market economy of the coastal centers of Tripolitania. The urban aristocracy owned numerous estates, some of which were in the Gebel, which they controlled through the use of tenants or slaves. The presence of absentee landlords is evident by the utilitarian nature of living quarters on estates which could produce 200,000 liters of oil a year.[109] Other Gebel estates were occupied by the "Libyan tribal elite." Many of the olive presses were clustered at sites along Roman roads and major trackways.[110] The aristocracy of cities like Lepcis made their fortunes through the trade in olive oil, which was sold throughout the Mediterranean.[111] It is important to realize that olive oil, a basic food item, was essential for the production of many products in antiquity: lighting fuel, soap, medicines, skin oils, perfumes and cosmetics.[112] It has been suggested that a per capita consumption of olive oil may have been twenty litres per annum in the Mediterranean area. From this, Mattingly estimates a need for annual production of olive oil in the range of

500,000,000 to one billion litres.[113] In the fourth century AD, "the Expositio Totius Mundi records that Africa [most of Tunisia] almost alone supplied the world with oil, while other sources suggest...that the city of Rome was largely dependent on African oil to supply its population with food and lighting."[114]

The production of various fine and coarse ceramic wares was common to both interior and coastal areas in Tripolitania. The site of Sabratha, along the coast, shows evidence of trading in pottery or goods transported in it with locations in Tunisia, as well as other Mediterranean trade centers. African Black Top Ware, Pantellerian Ware from an island off the Tunisian coast, and various types of pottery produced in southern Tunisia appear. However, much of this is replaced by local production in the third century. Dore concludes in his study on pottery from Sabratha and the Valleys that the pottery gives an indication of the development of the Tripolitanian oil industry which reaches its height in the second and third centuries, tapers off by the end of the fourth; and, by the sixth is no longer important. Ceramic production also occurs further east at Sidi Khrebish (Benghazi/Bernice). A study of 5650 lamps and fragments dating from the third century BC to the Islamic period were studied by D. Bailey in the 1980's. Hellenistic lamps were both imported and produced in the first three centuries B.C., and, during

the Roman period, lamps were produced in quantities until the third century AD. Lamps made of African Red Slip Ware from Tunisia appear from the fourth through the sixth century. Locally made lamps appear in large quantities again from the sixth century to the Islamic conquest. The site of Sidi Khrebish appears to have been mostly abandoned after the seventh century; however, "wheelmade Islamic lamps were found," probably from the tenth or eleventh centuries.[115] Other ceramic wares of African Red Slip from Tunisia completely inundated the area in the second and third century, comprising most of the imported ware in Sidi Khrebesh.[116] Considerable industrial activity was also noted for Sidi Khrebesh from archaeological excavations. Kilns for pottery manufacture dating from the first through third centuries were discovered. Ovens for baking or cooking, vats for storage of liquids and mills were found.[117] The famous shell-purple dye made from Murex was produced in large quantities at Sidi Khrebesh, as well as Lepcis Magna. Murex debris at Sidi Khrebesh has been dated from the first century B.C. to the seventh century A.D., the majority from the third century. Kilns were also associated with these sites, indicating that some murex were used for purple production and also for the production of lime.[118]

Sahil (Roman Africa - 3rd century A.D.) (Byzacena - 4th century A.D.)

The eastern coastal plains and interior plateaus and hills of modern Tunisia stretching from Sousse to Gabes and west to Theveste (Tebessa) correspond to Roman Byzacena. This is the fertile land of "la Tunisie orientale" of Despois. The coast has a temperate, warm climate year round; the steppes are cooler in winter and warmer in the summer. Rainfall along the coast averages 350 mm. and the interior - 200 or less. However, rainfall is irregular; there are seasons of draught and flood. In the rainy season the wadis near Qayrawân will be full, the rest of the year dry. However, some of the most extensive olive groves in Tunisia are located along the coastal plains between Sousse and Sfax. Grain also grows abundantly in this Sahel region. Byzacena, since antiquity, has been a center of olive and grain production, and a way point for traders by sea and by land. The fertility of Byzacena was attested to by Pliny; and Caesar found abundant wheat near Monastir in the first century B.C.[119] Despois dates the considerable expansion of olive growing to the second century A.D., with its height in the third century; but he had no literary or archaeological evidence to back this up. Pastoral nomads and small agricultural villages characterized the

interior.

The Kasserine Archaeological Survey project has attempted to "reconstruct the economy and society" of the high steppe region in Byzacena.[120] This region extends from the Dorsale range in the north to the Gafsa mountains on the northern edge of the Sahara. It is a region of steppe, ridges, passes, and depressions. The semi-arid climate and scrub plants and grasses make this a good environment for pastoralists. However, the remains of extensive Roman and pre-Roman settlements indicate that the region was farmed in antiquity. Of the 89 sites (out of 400 known sites) surveyed as of 1986 by the Kasserine project, 23 date to the first millenium B.C. or earlier, 57 to the late first through seventh centuries, and 14 showed evidence of habitation between the eighth and sixteenth centuries. Pottery shards gathered from these sites indicate settlement from the Roman through the Islamic period. Pottery produced in southern Tunisia at Gafsa and Sbeitla, as well as Islamic coarse wares, Berber ware, and Romano-Byzantine amphorae were found in large quantities.

The 1982-86 survey report recorded various types of settlements for the Romano-Byzantine era ranging from urban centers to small villages and farms, some of them fortified and with towers. From the remains of olive presses, wells, field systems, and rectangular enclosures,

the survey team concluded that the region had a mixed agricultural economy at this time. The remains of fields, analyzed from a site dating from the third through sixth centuries, showed the use of rubble "bands" to control runoff during heavy rains; and walls to trap water and collect it in cisterns. Other sites from the Romano-Byzantine period showed evidence of "crop cultivation ... based on an extensive field system of artificial terraces and cross-oued dams designed to guide, trap, and retain winter runoff."[121] A terrace, cistern and small stone aqueduct were found at the village of Qsar Guelal, a site at the foot of a mountain spur north of Kasserine, which also had olive presses, a fortified structure, Christian basilica and cemetary. Wells, cisterns, subterranean aqueducts, and aqueducts carrying spring water across a wadi were some of the other water supply and control technologies found at various locations. The report concluded that the evidence to date indicated a process of transition from pastoral nomadism to agriculture starting in the late first through second centuries. During the Romano-Byzantine period, this region was characterized by sedentary agriculture- both raising of crops and animals. This agriculture was sustained by an elaborate water control system. The preliminary evidence also indicated a return to pastoralism during the Islamic period.

The 1987 Kasserine Survey report produced more

evidence of the agricultural activities of this region. It produced in Roman times a surplus of olive oil and grain. Remnants of presses, which at only two sites could have produced 40-80,000 liters of olive oil, requiring 4000 to 8000 mature trees to supply, indicate a substantial surplus. Over 400 presses were charted for the area, some of them located in rows inside structures which "represented a considerable investment of capital and the anticipation of a large production capacity of olive oil."[122] Market networks would also be needed to dispose of this production. Fragments of grain mills and plant remains show that barley, and probably peas and lentils were grown. Grapes, figs, pistachios and almonds were produced as well.[123] The researchers concluded that in the first and second century, early agricultural settlements were located along ridges and land seems to have been divided into parcels. In the third through the fifth centuries, "settlement was extended to the heavier soils in the drainage basins... and there was also an increase in the number of smaller farming settlements and an expansion of the dry-farming systems on the marginal arable of the ridges." Also, production centers, probably similar to "villas" were subdivided into smaller units and worked by tenants.[124] Ceramic types from the Islamic period were found which dated to the thirteenth century.[125] Byzacena was also the site of a local ceramic

production. One particular form, called African Red Slip C was produced at sites such as Utica, and shipped to Spain, Italy, and other locations.[126]

AFRICA PROCONSULARIS

One of the most highly urbanized and developed parts of Ifrîqîya in antiquity was the region around Carthage. It is comprised of coast and the Tell intérieur, a region with enough moisture to raise grain without irrigation. The climate is humid, with rainfall in the 500 to 700 mm range. The region is intersected by the Medjerda, Mellègue, Tessa, Miliane, and Siliana rivers. The Medjerda flows east and then north to the Gulf of Tunis across the Tunisian Tell from its point of origin in Algeria. The next three rivers join the Medjerda along the way. The Medjerda valley is one of the most fertile regions in Tunisia with lush green hillsides in the Spring, and rolling farmland planted in olives, wheat, barley, vines, figs and almonds, interrupted by barren rocky hills. Further west is the Tine river, about forty miles from Carthage, separated from the Medjerda by mountain ranges, in the vicinity of the lakes near Bizerte along the northern coast. The region to the east and south of Tunis

is dotted with coastal fishing villages and towns along plains of grain. This region was one of the principle parts of Tunisia colonized by the French and one of the most productive.

Agriculture in Africa Proconsularis dates back to the Neolithic era. Peyras, in his study of the Tine river valley, concluded that a sedentary society of "agro-pastoralists" lived in hilltop villages well before the Phoenicians and Romans.[127] During the Punic period, the Numidian king Massinissa took over the Medjerda basin (Bagradas valley region) and developed it agriculturally; and, when he died he left the estates to his children. The Numidians remained there until Caesar's victory in 46 BC.[128] According to Kehoe's study of this region, the first major effort to exploit it under the Romans came in about 103 BC, when some of the veterans of the Jurgurthine War and Gaetulian tribesmen were given allotments of land in the Bagradas valley. In the first century AD, large-scale Roman landowners were investing in the region. "By the second century the Bagradas valley had become a major center for imperial estates."[129]

The most detailed study of this region is Dennis Kehoes's work on the estates in the Bagradas valley. Based on a series of six inscriptions related to the administration of imperial estates during the second century AD, he describes the system of share-crop farming

that was prevalent in this region. In essence, estates were granted by the Roman government, leased out, or privately owned. A certain percentage of the production of these estates was to be turned over to the government as "share rent," or taxes; the rest was used to support the landowner or coloni (tenent farmers)[130] or it was sold at market. Much of the "land would be worked by tenants crowded together in villages surrounding it,"[131] or by laborers, free or slaves. Coloni were organized in communities within the estates with their own officials. The crops mentioned in the inscriptions include: wheat, barley, beans, olives, grapes, honey, figs, and grasses. Approximately one-third of the crops were given by the coloni to the managers of the estates.[132] Cultivators were encouraged not to leave land fallow. The system was designed to produce the largest possible surpluses for the Roman government through encouraging long-term investment in intensive agriculture. "The Fiscus dictated a range of crops the coloni might cultivate, offered incentives for the cultivation of more intensive crops, and then exacted a share of whatever crops the coloni produced."[133]

This system, as Kehoe rightly points out, may not have existed uniformly in other parts of Roman North Africa. However, there are some parallels. "Inscriptions from other parts of North Africa suggest that the Roman government incorporated into estates existing agricultural

communities, which preserved much of their traditional organization."[134] Inscriptions at Sitifis in Mauretania Caesariensis and Theveste in Numidia attest to communities located on estates.[135] Estates also had communal complexes for markets, or temples. One estate in the Bagradas valley at Gasr-Mezuar had tabernae (shops) for public use, as did a private estate at Ain el-Melouk in Numidia.[136] The establishment of markets in Roman estates and towns has been discussed in detail by B. Shaw, who argues that the Roman calendric system was imposed on an already existing African periodic market scheme.[137] Some estates functioned as defensive strongholds with castella. Many of these are located in Mauritania Caesariensis and date to the second and third century, when Rome was most concerned to exploit the productivity of North Africa.[138] Thus, there is evidence of an effort by the Romans to intensively farm as much of their holdings as possible with whatever means necessary.

NUMIDIA- West and South

Stretching from the coast north of Cirta (Constantine), to the Sahara on the south, Numidia[139] is a land of contrasts - an incongruent collection of

terrains and modes of living. Southern Numidia is separated from the north by a series of mountains - Aurès, Kabylie, Djurjura. These ranges divide Numidia into coastal plain, Kabylie mountain region, high plains south of Cirta, Aures mountain region, Hodna Basin, southern piedmont, and Sahara. The coastal region, Kabylie, and northwest slopes of the Aurès receive some of the highest mean rainfalls in North Africa, sometimes as much as 1000 mm. The northern plains receive 400 mm, as do the southern slopes of the Aurès. Rainfall tapers off to less than 170 mm south of Biskra. However, rainfall is erratic and unpredictable. Summer storms can produce 45 mm in one hour, causing floods and erosion; and levels can differ by hundreds of millimeters from year to year. In addition, drainage flows in wadis and soil types can affect water retention or drainage. Limestone and sandstone hills intersected by steep wadis carry water north toward the sea from the high plains and Aures. A south drainage from a portion of the plains around Setif meets the flow from the Aures and produces a series of salt lakes between Tebessa and the Hodna mountains. In summer these evaporate leaving salt marshes (sebkha/chott). A fresh water aquifer 20 to 30 meters below the marshes is accessible even in the middle of these. Springs also flow down the slopes of the mountains. To the southwest, the Aurès are connected to the Saharan Atlas in the region of the Zab mountains.

North of the Zab is the Hodna Basin, a pre-desert steppe with a large salt chott and aquifers below. There is a line of depressions stretched along the Sahara from the Chott Djerid (Lake Triton) near Tozeur to the Chott Melhir further west, south of the Aures, Nementcha and Zab mountains.[140]

The sole epigraphical document from North Africa which reveals "in a detailed manner the functional, social, and organizational structure of one of the myriad irrigation systems that were to be found throughout the arid zone of the ancient Maghrib" was discovered in 1877 at Ain Merwana, ancient Lamasba, 100 km south of Cirta.[141] Lamasba is located in the Bellezma Plain, east of the Hodna Basin, in the semi-arid lands of Numidia. This region is characterized by settlements close to mountain springs, open plains with farmsteads, and a route used by Saharan nomads on their trek to summer pastures. Sometimes nomads provided labor for the fields in times of harvest or planting. There is the example of the 'Maktar Harvester" who managed groups of laborers south of Cirta. Tribesmen from the Jebal Nafusa region in Tripolitania were recruited to harvest during the time of Augustine.[142] B. D. Shaw argued that Lamasba was probably a major urban center since it was "at the nexus of the system of roads emanating from the Hodna, Sétif, and Constantine Plains.[143] Evidence from other sites in the

area shows that a variety of people owned land and participated in public life: African peasant cultivators, absentee Roman landlords, army veterans - many of them of African descent.[144] The decree records the arrangements for irrigating several plots during the reign of the Roman emperor Elagabalus (A.D. 218-22). In it are laid out a scheme of water distribution based on day and night time units. "Division of water by time rather than volume is typical only of artesian springs in the tell or of oases, both in modern times and antiquity."[145] The water passed through a collection basin from one proprietor's land to the next through a main descending channel which could be blocked for distribution to the adjacent terraced fields. A similar irrigation scheme in a region to the east of Lamasba is attested to by the Tablettes Albertini of the fifth century. In these, the water rights, specified by type, are sold with the property.[146] Trousset also documents such sharing of water by time units at Tozeur, near the Chott el-Djerid; Gabes, as attested to by Pliny the Elder; and at Ghadamès.[147] He contends that this was a common practice of indigenous communities located near "perennial springs of the Roman frontier zone." Shaw notes as well that several of the landholdings belonged to women. Based on descriptions of past and present irrigation schemes, Shaw concludes that the system at Lamasba was an indigenous one, employing "low-level

technology. And, "whatever new material techniques might have filtered into the Lamasba region were put to the service of a quite traditional African agriculture..."[148]

Along with evidence of water management technologies for agriculture there is evidence of olive cultivation in various parts of Numidia. At Bir Sgaoun, thirty five kilometers south of Tebessa (Theveste), six presses have been found in a single structure. The site is on the main Roman road leading from Tebessa.[149] Numerous presses have been observed near sites at Timgad (Thamugadi), and Diana Veteranorum north of Lambèse (Lambaesis).[150] The northern Aurès region has olive presses associated with third and fourth century sites.[151] However, many of the sites in Numidia are far from the coast, making the export of oil a costly procedure of transportation from the interior. It is likely that much of this was for local consumption, regional trade, or for the Roman military stationed in the region.

Pastoralism seems to have been a common mode of life in the regions near the salt marshes, plains and south of the Aurés mountains. In fact, Elizabeth Fentress argues that it was probably a "major feature of the Numidian market economy."[152] Evidence of pastoralism comes from several sources. Customs tariffs from Zarai (in the Hodna Basin) and Lambaesis, and Diocletian's price edict attest to varieties of animals and animal products being produced

in the Hodna region and the rest of Numidia. The Zarai tariff lists animals: horses, mules, donkeys, cows, pigs, sheep, goats; animal by-products: leather, hides, skins, glue, wool clothing; and slaves, dates, figs, wine, nuts, resin, pitch, alum, iron goods, and sponges.[153] Fentress argues that most of these products were locally produced in southern Numidia and most of them are pastoral products "in all stages of manufacture... The presence of alum, used in the finishing and dying of hides and wool suggests that the processing of these took place locally."[154] The question of where the alum may have come from is an interesting one. Alum is often associated with salt deposits. Also, the tariff indicates trade with the coast, sponges coming south; dates produced in the southern oases going north. Some of the animals are exempt from the tariff, notably those destined for the local market; whereas those passing through are taxed. This possibly indicates the passage of pastoralists from the south. African garments and wool products are mentioned in the Edict, specifically hooded cloaks, and carpets. However, the price of the African goods was lower than those produced in Egypt. Evidence of cloth production is rare, but Fentress mentions a fuller at Lambaesis; and an inscription from the Kantara pass near Symachus (Aurès range south of Timgad) which mentions a collegium of cloth dyers of purpuriorum, or murex dyed cloth. Given the

distance from the coast, it is most likely that the murex shell dye was shipped inland, producing expensive cloth.[155]

The most southern limits of Numidia mark the entrance to the unknown for the Romans, Byzantines, and most modern archaeologists and historians. But this region is crucial for an understanding of the Islamic period, for it is here and in southern Tripolitania that contacts across the Sahara were made and that Saharan trade was funneled into Ifrîqîya. It is also here that the balance between pastoralism and agriculture was so variable. However, during the pre-Islamic period, the Romans and Byzantines no more than touched the southern flanks of the Aurès and the northern shore of the Chott al-Djerid. Their fortifications are stretched in a thin and widely dispersed line from Gabes to the west, north of the large salt marshes on the edge of the Sahara.[156] There has been much debate as to the nature of these fossatum. Were they defensive forts for a military frontier? And when were they built? Baradez dates them to the time of Hadrian and claims they were defensive.[157] Van Berchem claims they were not defensive, but marked a legal rather than a military boundary which was established during the time of Gordian III.[158] Fentress presents a more complex picture of buildings dating from different periods and designed to serve varying functions. But, she suggests that the

majority near the Hodna and central Numidia were constructed during the period of Hadrian. The various fossatum and the roads connected with them are "designed to control and direct the flow of traffic into and out of the occupied areas." Customs tariffs have been found at some sites and "the fossatum, by re-routing trade, served as a customs boundary through which the movement of flocks, trade, and people could be carefully overseen."[159] The forts near the Saharan Atlas and the Tripolitanian oases of Ghadames, Bou Njem and Gheria el Gharbia were constructed under Septimus Severus. However, those in Tripolitania were larger and intended for garrisons; those in the Saharan Atlas were small, unimpressive and likely "customs and surveillance posts," according to Fentress.[160] The question is, who were these fossatum check points for? Trousset suggests that it is not coincidence that the limes follow a line roughly marking the limits of agricultural development as determined by rainfall - the line between the "desert and the sown."[161] In Tripolitania this zone was characterized in antiquity by dry-land farming, and pastoralism. Unfortunately, there has been no project like the Libyan Valleys Survey to study the Saharan Atlas and its slopes. So, it can only be suggested that a mixed agricultural/ pastoral economy took place in the pre-desert. The needs of these people would have led them to move north-south in

search of pasture, sowing crops in regions where they could settle in the spring and summer. Whittaker, in his latest book on the Roman frontiers, concludes that the clausurae walls, limes, and fortifications in North Africa were "never military barriers that divided the desert from the sown but internal controls on shepherds and herdsmen who traditionally traversed them."[162] The walls and fortifications in the mountain ranges of Numidia were to "control but not exclude seminomads..."and to keep the roads open.[163] Shaw associates these with protection of settlements of agriculturalists from raids by mountain dwellers or pastoralists.[164]

CONCLUSION

As can be seen from the discussion above, water and land management technologies in Ifrîqîya, often thought to to have been introduced by the Romans or Arabs, can be dated to before the Roman era. However, during the extension of Roman "peace" throughout this region from the second through fourth centuries A.D., indigenous agriculture was extended, intensified, diversified, and controlled. It was the agricultural production of grain and oil, and the raising of animals which created the

wealth of Ifrîqîya under the Romans and those who came after. However, it was partly the Roman introduction of incentives for production, such as quota systems, land grants, slave labor, and share-cropping; and their creation of a vast market network linking Ifrîqîya to Spain, Italy, and the East which made this economic system possible. The spread of olive culture throughout all of Roman North Africa, even the pre-desert, is an indication of this intensification of agriculture to support urban markets, military garrisons, and regional and overseas trade. This also made the economy of Ifrîqîya dependent on the stability of the Roman state since the market and ships for its goods were controlled by Rome. Trade between village, coast and interior, and other Mediterranean centers continued, as it had under the Phoenicians, Greeks, and Carthaginians; but, it centered on goods grown or produced in Ifrîqîya for an overseas market.

Ifrîqîya was thus an essential part of the Roman economy. If the production of Ifrîqîya failed for any reason, Rome would suffer. The continued expansion of the empire depended on the reliability of shipments of wheat and oil from Carthage, Tripoli, and other ports along the coast of Ifrîqîya. The oil of Ifrîqîya alone supplied more than half of the consumption of Rome. The policies of Rome vis-a-vis North Africa consisted, therefore, of a concerted effort to settle Roman soldiers and colonists on

the land; the introduction of mechanisms to control the types of crops produced, especially in the north; the creation of a tax quota to be paid in kind; and to organize a fiscal administration to manage all this. The shipment of oil, wheat, and wine from Ifrîqîya to Rome was largely managed by the state, or entrepreneurs with government contracts. Defensive fortifications were located along a line marking the division between fragile agricultural communities in the south, and major routes for nomads bringing their flocks north, forming a permeable shell to protect and manage these two economic sectors. A complex system of roads was built to connect the limes, agricultural regions, and coastal markets, and to facilitate the movement of the Roman military when needed. These routes continued to be used during the Islamic period, and served the same purposes.

Intense settlement under the Romans occurred primarily along the northern coastal regions where rainfall was sufficient for growing grain, olives and grapes easily. In general, there was a trend toward "a more intensive use of the land than that practiced by native groups..."[165] This can be seen in the inscriptions from the Bagradas Valley where the Roman government tried to intervene to keep lands under cultivation rather than letting them lie fallow or become pasture land. Sitif (Sitifis) was another center where it is likely that much

of the local production was intended for shipment to Rome and local military consumption.[166] Urban centers and villages flourished along the coasts, the interior plains and mountains, and in the pre-desert as well. Those who inhabited the fringes of the Sahara (pre-desert) practiced a combination of animal husbandry and intermittent farming, or "semi-nomadic systems of subsistence" with herding of sheep, and goats with "patch cultivation on the wadi floors."[167] Many of these sites had been inhabited for centuries before the Romans, some even dating back several millennia.[168] In Tripolitania, mixed farming in the coastal plains was dated to the fourth millennium B.C. by Barker and Jones in their 1979-81 Libyan Valleys Survey report. Small fortified settlements in the pre-desert region of Tripolitania, and gsur, can be dated to the late pre-Roman era.[169] Areas in the pre-desert of Tripolitania were more heavily farmed during the third century AD when they produced olive oil for markets on the coast than in earlier periods.

However, the agricultural techniques employed, and the water control schemes common during the Roman period were often indigenous to the region. The regions farmed had been in use since the eighth century or earlier by native groups, often under a mixed regime of agriculture and pastoralism. The Romans built aqueducts to feed the urban water systems, cisterns to hold rainwater and dams

to contain streams in wadis. The water for irrigation was often provided by schemes which consisted of simple technologies requiring few tools and readily available materials; and they were highly productive with grain yields in the fertile zones as high as 300 to one.[170] What these schemes did require, however, was cooperative management and intensive labor to build levees, terraces, and ditches; and to regulate access to water and land boundaries. They were also prey to disruption and abandonment due to extreme weather conditions or political instability. Therefore, the ability of governments, communities, agricultural and pastoral groups, and families to regulate, adjudicate and protect land, water rights, labor, surpluses, types of crops, taxes, markets and inheritance often could make the difference in the balance between pastoral and agricultural land use patterns.

In the semi-arid lands of Tripolitania, and probably elsewhere, these factors, combined with the production of surpluses, led to extremes of poverty and wealth - where only those in control of land could accumulate power and prestige.[171] In the more humid northern regions, the control of the production of surpluses was not as fraught with uncertainty; and thus, a more mixed society based on small, medium and large landholdings is evident, though the tendency was for large estates to predominate even in

the pre-Roman era.[172] These factors may also play a role in the sedentarization of nomadic groups. It is these issues which could be most readily affected by the imposition of a strong government or empire. Thus, Roman rule, which attempted to control all of the Maghrib, and to organize agricultural production, transport, and sale to benefit the state would tend to increase sedentarization and the balance of agricultural to pastoral use of the land. And, divisions in society based on wealth and prestige could devolve from both the acquisition of wealth made possible by Roman rule and by the very nature of the need to organize agricultural production and manage surpluses. Even in the arid zone region of Ghirza, practicing indigenous agrarian techniques produced "an accumulation of wealth and power as steep, one might say, as the severely attenuated sides of the pyramid-obelisks with which some of the grandees were wont to crown their desert mausolea."[173]

North Africa was also a center for the production of manufactured items meant for local use, regional sale, and the Mediterranean market. Among the products produced were: pottery, both fine-ware and coarse; tableware, amphorae, and roof tiles; purple dye and dyed cloth; stone quarried and shaped for buildings; animal products: leather, hides, wool; clothing and carpets; soap, perfumes, etc. One important index of economic activity

that can be followed better than others is the export and import of ceramics. Ceramic evidence can "inform us about...trade in major perishable commodities, and ...trade in manufactured goods, both of middle-range and luxury...and lower value cooking wares."[174] From the second to fourth centuries, sites like Carthage and Utica show that 80% of all ceramics were produced in northern and central Tunisia[175] This was also a peak period for exports of pottery throughout the region. Trade in pottery continued at these sites through the Vandal and Byzantine periods.

One of the controversies in the discussion of trade during this period is the problem of trade across the vast sands of the Sahara. It would be exciting to imagine the Romans careening across the desert in chariots in search of gold.[176] However, there is little evidence that this occurred. The arguments in favor of such a scenario usually mention the existence of rock paintings and engravings of two-wheeled horse-drawn chariots on a "route" from Lepcis to Adrar (near Gao and Timbuktu), and in the west south of Figuig (Southern Oran) to points deep in the desert.[177] Others cite findings of Roman artifacts as far as Zawila, and Abalessa (the Algerian desert).[178] There has been speculation that the mysterious Garamantes were involved in the trade in West African gold.[179] However, T. Garrard points out that "regular trans-Saharan

trade was hardly feasible before the first or second century A.D., when the camel began to come into use as a pack animal."[180] Upon a study of the availability of gold for coinage, and the weight-standards for gold coinage in North Africa, Garrard concludes that a trans-Saharan gold trade did exist by the end of the third century A.D. However, the minting of gold coins was rare in Ifriqiya before that time. "The Romans struck no gold in North Africa between 146 B.C. and the date when the Carthage mint closed, apparently soon after A.D. 68."[181] However, by 296 A.D., the Carthage mint began to strike imperial gold. In 325, the emperor Constantine directed that taxes be paid in gold, though this was not specifically a North African directive, and a provision was made for the exchange of gold dust. By 403, Septiminus, the Proconsul of Africa, decreed taxes on traders and moneylenders should be paid in gold.[182] In 412, the North African land tax was to be paid in silver and gold, and by 429 it was solely in gold.[183] From this, Garrard concludes that gold currency was more abundant by this time, and that perhaps "regular supplies of bullion were now reaching North Africa from across the Sahara."[184] This production of gold coinage continued under the Byzantines in the sixth century; however, it died out after 685, when the Arab conquest of North Africa was under way.[185] The payment of tribute in gold to the Arabs, and later the minting of

gold coins at Qayrawan after 698 is an indication of where the gold went. By 720, there is production of gold coinage bearing the name Ifrîqîya.[186] If Garrard's conclusions are backed up by further studies, the gold trade issue may be put to rest.

The question is, where did this gold come from, and how did it get to Ifrîqîya? There were several major gold fields in the Sudan. In the western Sudan, gold was mined at Bambuk and Bure; and, south of Jenne along what is now called the Black Volta River at sites like Bima; and the Lobi goldfield. Regular extraction from Bambuk and Bure occurred by the fourth century A.D.. Bambuk was the principal supplier for ancient Ghana, and Bure supplied Jenne-Jeno, and Gao. Gold dust was also found in small quantities in northern Nigeria, which, according to Garrard, may have been utilized as early as the second millenium. Most likely, Berber middlemen were involved in the transport, but we have little evidence to resolve this issue for the period up to the Arab conquest.[187]

The transition from Roman to Vandal, and Vandal to Byzantine rule did not result in "cataclysmic" change for much of North Africa. The Vandals "seized some of the best lands of Proconsularis and Byzacium for themselves without displacing the peasantry."[188] In other areas, Romano-Libyans continued to farm, and Berber tribes continued to pasture their animals and sow their crops. The Byzantine

reconquest in 533 A.D. resulted in continued agricultural development and access again to the wider Mediterranean market.[189] However, the plague in the 540s and intermittent revolts against the Byzantines seem to have resulted in a depopulation of North Africa.[190] This may not have had a serious effect on agriculture; oil and grain were exported to Byzantium as late as the seventh century.[191] There was construction of many Byzantine fortifications, and churches; and the construction of gsur as well.[192] Red slip ware was exported into the seventh century. "The symbiosis of rural and urban development"[193] continued to extend out over the face of Ifrîqîya to meet the "Arab conquest." But, the greatest incentive for the economy of Ifrîqîya - a regionally linked economic system controlled by a central state which provided markets, transport, security, and administration - such as Rome, had ceased to exist by the time the Arab conquest occurred. It is the reconstruction of such a system which allows the early Islamic states in North Africa to reach the success of the economy of Ifrîqîya under the Romans. And, it was the disintegration of such a unified system with which the Hafsids had to cope, and were unable to reinstate in the thirteenth century.

1.Fernand Braudel, On History, (1969), trans. by Sarah Matthews, (Chicago: University of Chicago Press, 1980), 10.

2.See M. Charles de la Ronciére, La découverte de l'Afrique au moyen âge: cartographes et explorateurs, vol. 1: L'intérieur du continent, (Caire: L'Institut français d'archéologie orientale, 1924).

3.See B.D. Shaw's article "Climate, Environment, and History: the Case of Roman North Africa" in T.M.L. Wigley, M.J. Ingram and G. Farmer, editors, Climate and History:Studies in Past Climates and Their Impact on Man, (Cambridge: Cambridge U. Press, 1981), 382. He cites, among others, the work of E. W. Bovill, "The Sahara," Antiquity, 2, (1929), 441-23; and R. Capot-Rey, Le Sahara français, (Paris: Presses universitaires de France, 1953).

4.See L. Carton, "Climatologie et agriculture de l'Afrique ancienne," Bulletin de l'Academie d'Hippone, 27 (1894), 1-45; and L. Lavauden, "Les forêts du Sahara," Revue tunisienne, 33, (1927), 67-94.

5.Abdallah Laroui, op. cit., 16.

6.See J. R. Burns and B. Denness, "Climate and Social Dynamics: The Tripolitanian Example, 300B.C. - AD 300," in Buck and Mattingly, Town and Country, 201-226. They state that based on climate modelling studies of the period from 1580 to 1840, historically, North Africa, in periods of global warming, had low precipitation, drought and famine; and that in periods of global cooling, there was more precipitation and more plague. They then suggest that this would correspond to patterns of increased pastoralism. If one followed this line of reasoning, then the Hilali invasions should have occurred in a period of global warming and the 14th century (Black Death) should have been cooler!

7.Shaw, "Climate," 379.

8.Ibid., 380.

9.Ibid., 386-87.

10.Jean Despois, La Tunisie orientale, 240. Here he discounts the entire climatic thesis as probably incorrect, and, even if climatic change had occurred it was not necessarily the explanatory factor in explaining the prosperity of the Romans or the lack of it in recent times. His surmise is currently supported by recent

archeological studies.

11.Shaw, "Climate," 389-94. Another issue was the denuded countryside of the modern era; yet, according to Boudy's four volume Economie forestière nord-africaine, forest cover was extensive until the first half of the twentieth century when the colons were granted concessions to cut them down.

12.Ibid., 395.

13.See the various reports in Libyan Studies and the conclusions in G. Barker, "Agricultural Organisation in Classical Cyrenaica: the Potential of Subsistence and Survey Data," Cyrenaica in Antiquity, (Oxford: Society for Libyan Studies Occasional Papers I, 1985), 121-134. He states: "It has often been argued that intensive farming developed in the pre-desert in antiquity because the climate was wetter, but our detailed geomorphological investigations have found little evidence to support this hypothesis, although there is mounting evidence for a detrimental impact of the farming system on soil and vegetation cover. Present rainfall is insufficient for most of the crops represented in the middens, and the elaborate system of walls was clearly designed in most cases to concentrate the run-off from a large area of the plateau into a small area of cultivable soil on the wadi floor." 131.

14.Pierre Morizot, "L'Aurès et l'olivier," Antiquités africaines, 29 (1993), 177-240. Basically this is a study on the remains of olive presses. 175 olive pressing sites were identified by Morizot for "antiquity," but he has no division of Roman vs pre-Roman presses.

15.Shaw, "Climate," 364. This is one of the few articles on the subject of climatic change in the Maghrib to seriously question whether there is enough data to be able to draw conclusions on this issue given that almost all research has been concentrated on historical texts and archeological remains with few studies in the fields of historical geology or palaeobotany.

16.E.F.Gautier, Le passé de l'Afrique du Nord, (Paris, 1937),114.

17.Yves Lacost, Ibn Khaldun: The Birth of History and the Past of the Third World, trans. of 1966, (London: Verso Editions, 1984), 76.

18.Shaw, "Climate," 384. Cites: G. Marçais, Les Arabes en Berbérie du XIe au XIV siècle (Paris, E. Leroux) & La Berbérie musulmane et l'Orient au Moyen Age (Aubier: Editions Montaigne, 1956); C. Courtois, Les Vandales et l'Afrique (Paris: Arts et métiers graphiques, 1955); and H. Djait, "L'Afrique arabe au VIIIe siècle (86-184/705-800)," Annales (ESC), 28, 601-21.

19.Susan Raven, Rome in Africa, new edition (London and New York: Longman, 1984), 207.

20.Abdulwâḥid Dhanûn Ṭâha, The Moslem Conquest and Settlement of North Africa and Spain, (London & New York: Routledge, 1989); and Mahmud Ahmed Abuswa, The Arabization and Islamization of the Maghrib: A Social and Economic Reconstruction of the Maghrib During the First Two Centuries of Islam, PhD dissertation in History at the University of California, Los Angeles, 1984.

21.al-Tijânî, Rihla, Gabes.

22.H. R. Idris, "L'invasion hilâlienne et ses conséquences" Cahiers de civilisation médiévale, 11, 353-69; "De la réalité de la catastrophe hilâlienne," Annales (ESC), 23, 390-6.

23.Michael Brett, "Ifrîqiya as a Market for Saharan Trade From the Tenth to the Twelfth Century A.D.," Journal of African History, X, 3 (1969), 347-64.

24.Lacoste, chapter 4. Brent D. Shaw, "Fear and Loathing: the Nomad Menace and Roman Africa," in C. M. Wells (ed.), L'Afrique Romaine: Les conférences Vanier 1980, (Ottowa: The University of Ottowa Press, 1982), 29-50.

25.Shaw, "Nomad Menace," 34.

26.Ibid., 47.

27.As quoted in Shaw, "Nomad Menace," 33. From Frend, "Nomads and Christianity in the Middle Ages," Journal of Economic History, 26 (1975), 211-12.

28.Frend, "The End of Byzantine North Africa: Some Evidence of Transitions," Histoire et archéologie de l'Afrique du Nord iie colloque international, (Genoble, 5-9 Avril, 1983), published by Bulletin archéologique du C.T.H.S., nouv. sér., fasc. 19 B, (Paris, 1985), 387-97.

29.Shaw, "Climate," 388.

30.Ibid., 388.

31.Stephen Gsell, "La Tripolitaine et le Sahara au iiie siècle de notre ère," Mémoires de l'Académie des Inscriptions et Belles-Lettres, t. 43 (1926), 155-6. He claims the sources of the prosperity of Leptis and other Roman towns in Tripolitania were on the other side of the Fezzan in the Sudan. And, Maurice Lombard, "L'or musulman du VIIe au XIe siècles" Annales, Economies, Sociétés, Civilisations. II (1947), 143-60.

32.G. and C. Charle-Picard, Daily Life in Carthage (London, 1961), 217.

33.R.C.C. Law, "The Garamantes and Trans-Saharan Enterprise in Classical Times," Journal of African History, VIII, 2 (1967), 181-200.

34.Claude Cahen, "L'Or du Soudan avant les Almoravides: mythe ou réalité?" in 2000 Ans d'histoire africaine: Le Sol, la parole et l'ecrit: mélanges en hommage à Raymond Mauny, Vol. 2 (Paris: Société française d'historie d'outre-mer, 1981), 539-45.

35.Timothy F. Garrard, Akan Weights and the Gold Trade, (London & New York: Longman, 1980); and, "Myth and Metrology: the Early Trans-Saharan Gold Trade," Journal of African History, 23 (1982), 443-61.

36.Ibn ʿAbd al-Ḥakam, Futûḥ Ifrîqîya wa al-Andalus, edit. and trans. Albert Gateau from Futûḥ Miṣr, (Alger: Éditions Carbonel, 1948), 40, 1.

37.Ibid. See pages 56-59 where Muʿawiya b. Hudayj is directed toward the Maghrib and also takes booty in Ifrîqîya and undertakes three incursions into Ifrîqîya. Here the two terms are used for the same territory, though later sections seem to refer to western sections as the Maghrib.

38.Abû al-Ḥasan ʿAlî b. al-Ḥusayn al-Masʿûdî, Murûj al-dhahab wa maʿâdin al-jawhar, ed. A. C. Barbier de Meynard and Pavet de Courteille, Paris 1865, reprint (Beirut: Publications de l'universite libanaise, 1977), vol. 1, chap. 16.

39.al-Bakrî, op. cit., 21. (my translation). Even though al-Bakrî lived in the eleventh century and never travelled to North Africa, much of his information on Africa was taken from the lost work of Muḥammad b. Yûsuf al-Warrâq (292/904 - 363/973) of Guadalajara who spent many years in

Qayrawân. However, al-Bakrî added new details on the events of his own period on the Almoravids and Ghâna. See Corpus, 62-3.

40.ʿAlî b. Mûsâ Ibn Saʿîd al-Gharnâṭî (al-Maghribî), Kitâb Basṭ al-arḍ fî al-ṭûl wa al-ʿarḍ in E. Fagnan, Extraits inédits relatifs au Maghreb (Géographie et histoire), (Alger: Jules Carbonel, 1924), 6.

41.ʿImâd al-Dîn Abû al-Fidâ', Taqwîm al-buldân, edit. M. Reinaud and de Slane: Géographie d'Aboulféda, (Paris: L'Imprimerie Royale, 1840), 122.

42.Aḥmad b. Yaḥya b. Faḍl Allah al-ʿUmarî, Masâlik al-abṣâr fî mamâlik al-âmṣâr, Chaps. 8 to 14 edit. by Abû Ḍayf Aḥmad, (Tunis: 1988), 81.

43.Shaw, "Water," 137.

44.G.W.W. Barker and G.D.B. Jones, "The UNESCO Libyan Valleys Survey 1979-1981: Paleaoeconomy and the Environmental Archaeology of the Pre-Desert," Libyan Studies, 13 (1982), 12.

45.J. Desanges, "Les protoberbères," Histoire generale de l'afrique: II: Afrique ancienne, edit., G. Mokhtar (Unesco, 1984), 465.

46.Camps, "Massinissa," 85-7; as cited in Abuswa, 64.

47.Desanges, op. cit., 465-6.

48.Raven, op. cit., 14-5.

49.Shaw, "Water, and Society in the Ancient Maghrib: Technology, Property and Development," Antiquités africaines, 20 (1984)," 137.

50.Shaw, "Water," 153- 5. He cites C. Vita-Finzi and O. Brogan, "Roman Dams on the Wadi Megenin," Libya anitiqa, 2 (1965), 65-71; P.S. Bellwood, "A Roman Dam in the Wadi Caam, Tripolitania," Libica anitiqua, 3-4 (1966-7), 41-44; and others, listing numerous examples of abysmal Roman failures such as the dam on the wadi Caam, which had to be continually extended; or that on the Wadi Megenin near Sidi Gelani (J. Nafusa) which was circumvented by the river; and finally the lower Wadi Megenin dam which burst.

51.Shaw, "Water," 122. This is probably one of the most thorough articles on the subject to date.

52.Ibid., 126.

53.Ibid., 127, where he states in regard to the assumption that the cadastral patterns were too regular to be other than Roman, but the lines of agricultural exploitation and the nucleated settlements did not correspond to the Roman survey grids - so - "This difference not only suggested that the agrarian units of exploitation were prior in date to the survey lines which had been arbitrarily superimposed on them, but also that there existed a more basic contradiction between the modes of agrarian production and the Roman interests as reflected in their cadastral networks." Also, in note 20: "It seems more probable that there existed an indigenous wadi-terrace agriculture long before the Roman militarization of the region which continued to function long after the military structure, which had been imposed on it had ceased to exist."

54.J.-Marcel Solignac, "Travaux hydrauliques Hafsides de Tunis," Revue africaine, 79 (1936), 517-80; and "Recherches sur less installations hydrauliques de Kairowan et des steppes tunisiennes du VIIIe au XIe siècle (ap. J.-C.)," Annales de l'institut d'etudes orientales d'Alger, 10 (1952), 5-273; 11 (1953), 60-170.

55.Shaw, "Water," 129. He cites the work of Despois, "Le Djebel Ousselat, les Ousseltiya et les Kooub," CT, 7 (1959), 407-27; and Chatelain, "Note sur le système hydraulique de Bir-el-Adine," B.C.T.H., 1913, 351-52.

56.Shaw, "Water," 160.

57.The geographical divisions here will correspond to the Roman divisions of North Africa for the sake of clarity. Refer to map I in Appendix A. Also, in what follows the discussion of water schemes will concentrate on agricultural systems - not urban. The monumental aqueducts to supply urban dwellers homes and palaces will not be discussed.

58.This is roughly from Gafsa to Ajdabiya.

59.See D.L. Johnson, Jabal-al-Akhdar, Cyrenaica: an Historical Geography of Settlement and Livelihood, (Chicago: Chicago U. Press, 1973); and J.A.N. Brhony, "Semi-nomadism in the Jebel Tarhuna," in S.G. Willimott and J.I. Clarke, eds., Field Studies in Libya, 1960.

60.This is quoted in Barker and Jones, op. cit., 3.

61.R.G. Goodchild and J.B. Ward Perkins, "The Limes Tripolitanus in the Light of Recent Discoveries," (1949), reprinted in Libyan Studies: Select Papers of the Late R.G. Goodchild, (London: Paul Elek, 1976), 17-34.

62.Olwen Brogan, "The Roman Remains of Wadi el-Amud," Libya Antiqua 1 (1964), 47-56.

63.Olwen Bragan and D.J. Smith, Ghirza: A Libyan Settlement in the Roman Period, (Tripoli: Department of antiquities, 1984), 227. Their argument is partially based on the existence of a "Libycized Punic written in the Latin alphabet that was used in the pre-desert at least until the fourth century."

64.Ibid. This quote is from Cod. Theod., vii, 15, 1.

65.Brogan and Smith, 229.

66.Ibid., 229-30. See Barker and Jones' comments on the dating of these inscriptions. p. 3.

67.Ibid., 3.

68.Mattingly, "Roman Tripolitania," 52.

69.Ibid., 4.

70.David J. Mattingly, "New Perspectives on the Agricultural Development of Gebel and Pre-Desert in Roman Tripolitania," in Désert et montagne au Maghreb: Hommage à Jean Dresch, eds. and published by Revue de l'occident musulman et de la Méditerranée, 41 & 42 (1986), 50.

71.Barker and Jones, op. cit., 1-8. Also, cite pottery recoveries from Ben Telis dating from post 15th century. 8.

72.Ibid., 12.

73.Ibid., 12.

74.Ibid., 17.

75.Mattingly, "Olive Oil Production in Roman Tripolitania," in Buck and Mattingly, Town and Country, 27-46.

76. Brogan and Smith, Ghirza. Also see Barker and Jones, "Survey, 1979-81," where they state: "there are ploughing scenes on reliefs from Ghirza, tomb reliefs elsewhere

depicting cereals, olives, vines, and various fruits, and of course the massive stone presses- presumably designed for olives, though perhaps also for grapes...,"17-8.

77.See Mattingly, "Roman Tripolitania," 57-8; G.W.W. Barker and G.D.B. Jones, "Investigating ancient agriculture on the saharan fringe: the UNESCO Libyan Valleys Survey," in S. Mcready and F.H. Thompson (eds.), Archeological Field Survey in Britain and Abroad, (London: 1985), 225-41. Also, C. O. Hunt et al, "ULVS XVII: Paleoecology and Agriculture of an abandonment Phase at Gasr Mm 10, Wadi Mimoun, Tripolitania," Libyan Studies, 18 (1987), 1-13.

78.Richard W. Bulliet, The Camel and the Wheel, (Cambridge: Harvard U. Press, 1975), 194. He cites an article by O. Brogan, "The Camel in Roman Tripolitania," Papers of the British School at Rome, 22 (1954), 126-31.

79.Ibid., 196. Ibn Khaldûn, Histoire, I, 164.

80.Ibid.

81.Ibid., 201.

82.Mattingly, "Roman Tripolitania," 59.

83.Ibid., 59, sums up the evidence of tombs costing up to 25,000 denarii.

84.Ibid., 59-60.

85.Barker and Jones, "Survey, 1979-81," 19-20. See their calculations based on a comparison to contemporary peasant farming in semi-arid climates.

86.Dore, op. cit., 84.,

87.Barker and Jones, "Survey, 1979-81," 2-3.

88.J. R. Burns and B. Denness, "Climate and social dynamics: the Tripolitanian example, 300 BC-AD 300," in Buck and Mattingly (eds.), Town and Country in Roman Tripolitania. Papers in Honour of Olwen Hackett, (Oxford: British Archeological Reports International Series 274, 1985), 201-25.

89.Hunt et al, "Paleoecological Studies," 2.

90.See D. Mattingly, "The Laguatan: A Libyan Tribal Confederation in the Late Roman Empire," Libyan Studies, 14 (1983), 96-108; and Barri Jones and Graeme Barker, "Libyan Valleys Survey," Libyan Studies, 11 (1980), 11-36.

91.B.A. Chatterton and L. Chatterton, "A hypothetical answer to the decline of the Granary of Rome," Libyan Studies, 16 (1985), 95-99.

92.Jones and Barker, "Libyan Valleys Survey, 1980," 23.

93.Barker and Jones, "Survey 1979-1981," 33.

94.Barker and Jones, "Survey 1979-81," 1-34. See pages 31-33. The Romano-Libyan period of intensive agricultural exploitation lasted from the late first century A.D. to the late third century before being replaced by more traditional forms of land-use for the pre-desert. But the researchers contend that the increased production of new crops and use of new irrigation techniques were needed to support an ever growing population. This led to competition for water and soil and intensive fortification of farming communities. Intensive farming continued into the Islamic period in more northern wadis, but disappeared along the more southern edges.

95.J. N. Dore, "Pottery and the History of Roman Tripolitania: Evidence from Sabratha and the UNESCO Libyan Valleys Survey," Libyan Studies, 19, 1988, 61-86.

96.See: Dore; D. J. Mattingly, "The Olive Boom. Oil Surpluses, Wealth and Power in Roman Tripolitania," Libyan Studies, 19, 1988, 21-42; J.B. Ward-Perkins and S.C. Gibson "The 'Market Theater" Complex and Associated Structures, Cyrene," Libyan Studies, 18, 1987, 43-72.

97.C.O. Hunt et al, "ULVS XVII: Paleoecology and Agriculture of an Abandonment Phase at Gasr Mm10, Wadi Mimoun, Tripolitania," Libyan Studies 18 (1987), 2.

98.Brogan and Smith, Ghirza. See Appendix II by Smith and Tagart on Islamic pottery and lamps from building 32.

99.Al-Bakrî, op. cit., 12 (AR)/31(FR).

100.Ibn Khaldun, "Berbers", 197.

101.Mattingly, "Roman Tripolitania," 49.

102.Ibid., 49.

103.Ibid., 53. Cites work of Despois on Djebel Nefousa and A. Louis, Tunisie du sud. Ksars et villages de crêtes, (1975).

104.Mattingly, "Roman Tripolitania," 56.

105. R. G. Goodchild, "Roman Sites on the Tarhuna Plateau of Tripolitania," (1951), reprinted in Libyan Studies: Selected Papers of the Late R. G. Goodchild, ed. Joyce Reynolds, (London: Paul Elek,1976), 84-88.

106.Ibid., Appendix II.

107.Dore, op. cit., 70-1.

108.Ibid., 72-82.

109.Mattingly, "Olive Boom," 29.

110.Ibid., 28. See map.

111.Mattingly, "Roman Tripolitania." He cites a number of literary and archeological sources attesting to the wealth of Lepcis families and based on the production of olive oil. Many of these estates, unlike those in the pre-desert, were manned by slaves. Also, in his article "Olive Boom," he speculates that Tripolitanian oil may have filled up to 10% of Rome's annual imports. (31)

112.Mattingly, "The Olive Boom," 22.

113.Ibid., 22.

114.Fentress, op. cit., 112. See note.

115.D. Bailey, "The lamps of Sidi Khrebish, Benghazi (Bernice): Imported and Local Products," in Graeme Barker, John Hoyd, and Joyce Reynolds, Cyrenaica in Antiquity, (Oxford: B.A.R., 1985), 195-204.

116.P.M. Kenrick, Excavations at Sidi Khebish Benghazi (Berenice), Vol. III, Part I: The Fine Pottery, (Tripoli: Deptartment of Antiquities, 1985), 493-8.

117.J. A. Lloyd et al, Excavations at Sidi Khrebish Benghazi (Bernice), vol. 1 Buildings, Coins, Inscriptions, Architectural Decoration, (Libya: Department of Antiquities, 1977), 211-229.

118.David S. Reese, "Industrial Exploitation of Murex Shells: Purple-dye and Lime Production at Sidi Khrebish, Benghazi (Bernice), Libyan Studies, 11 (1979-80), 79-93.

119. As quoted in Despois, La Tunisie orientale, Sahel et basse steppe, (Paris: Les belles lettres, 1940),128-9.

120. All references to the Kasserine project are from R. Bruce Hitchner, "The Kasserine Archaeological Survey, 1982-1986," Antiquités africaines, 24 (1988), 7-41.

121.Ibid., 27.

122.Mattingly in Hitchner, "The Kasserine Archeological Survey - 1987," Antiquites africaines, 26 (1990), in Appendix 1, 251-2.

123.Hitchner, "The Kasserine Archeological Survey - 1987," 245.

124.Ibid., 244-6. Another study reaffirms these observations: Jean Barbery and Jean-Pierre Delhoume, "La voie romaine de piedmont. Sufetula - Masclianae (Djebel Mrhila, Tunisie centrale)," Antiquités africaines, 18 (1982), 27-43.

125.Lucinda Neuru in Hitchner, "1987," Appendix 2, 259. She includes tenth to eleventh century Tunisian ware and eleventh to thirteenth century green-glaze over cream paste ware.

126.Ricardo Gonzalez Villescusa, "Origine et Diffusion d'une forme peu courante de céramique africaine," Antiquités africaine, 29 (1993), 151-61.

127.J. Peyra, "Paysages agraires et centuriations dans le bassin de l'Oued Tine (Tunisies du Nord)," Antiquités africaines, 19 (1983), 209-53.

128.Kehoe, The Economics of Agriculture on Roman Imperial Estates in North Africa, Gottingen, Germany: Vandenhoeck & Ruprecht, 1988). Here he describes in detail the structure of land management, labor and production in the fertile Bagradas region in northern Tunisia. 8-9. He bases his account on Livy, Appian, Diodorus, Sallust and other Roman authors. Fentress (see discussion of Numidia) suggests that this was not common in areas outside Punic control and that land was probably held in common for the uses of the tribe. 54.

129.Ibid., 11.

130.Ibid., 154. "The <u>coloni</u> were sharecroppers, paying a fixed proportion of their crops as rent, and occupying their land under perpetual leasehold."

131.Ibid., 74.

132.Ibid., 34-5. The inscription at Henchir-Mettich mentions payment in keeping with the law of Mancia of one third shares of the crop after the fifth year of harvest of vines, or the tenth year of olives. If the olives were grafted to wild trees- the third was due after five harvests. Also, the one third was assessed on threshed wheat, threshed barley, and pressed oil.

133.Ibid., 224.

134.Ibid., 192.

135.Ibid. At Sitifis, an imperial estate had a community with a decurio and princeps. <u>Castella</u> in this region are linked by Kehoe to the process of incorporation of indigenous farming communities into Roman estates.

136.Ibid., 202. This issue of the markets established during the Roman period is taken up in B.D. Shaw's article on the periodic market in North Africa.

137.Brent D. Shaw, "Rural Markets in North Africa and the Political Economy of the Roman Empire," <u>Antiquités africaines</u>, 17 (1981), 37-83.

138.Kehoe, op. cit., 205-15.

139.Elizabeth Fentress, <u>Numidia and the Roman Army: Social, Military and Economic Aspects of the Frontier Zone</u>, (Oxford, B.A.R. International Series 53, 1979), 18. "Numidai is applied in Polybius to all Africans not subject to Carthage: it is only after the Roman occupation that it acquires a specific geographical sense."

140.See for a more detailed description of a very complex landscape: Fentress, Chapter 2. However, her analysis of textual and archaeological evidence is disappointing. She basically concludes that all the evidence is so contradictory, scattered and suspect that we can basically determine very little about the nature of the economy or peoples of the region.

141. See for bibliography and discussion: Brent D. Shaw, "Lamasba: an Ancient Irrigation Community," <u>Antiquités africaines</u>, 18 (1982), 61-103.

142.B. Shaw, "Nomad Menace," 47-8.

143.Shaw, "Lamasba," 64-5.

144.Ibid., 67.

145.Ibid., 72-3. Presents the arguments against a dam or reservoir.

146.C. Courtois, et al., Tablettes Albertini: actes privés de l'époque vandale (fin du Ve siècle), (Paris, 1955), 223. As quoted in Shaw, "Lamasba," 80-1.

147.P. Trousset, "Les oasis présahariennes dans l'antiquité: partage de l'eau et division du temps," Antiquités africaines, 22 (1986), 163-93.

148.Shaw, "Lamasba," 94-5.

149.S. Gsell, Les monuments antiques de l'Algérie, (1901, Paris), vol. 1, 29-31.

150.Fentress, op. cit., 182.

151.H. Camps-Fabrier, L'Olivier et l'huile dans l'Afrique Romaine, (Algiers: 1953).

152.Fentress, op. cit., 185.

153.Ibid., Appendix 3, 208-9. Translation of tariffs.

154.Ibid., 184.

155.Ibid., 184-6.

156.See: Pierre Salama, Les Voies Romaines de l'Afriques du Nord, (Alger: imprimerie officielle du gouvernement, 1951); Denis Pringle, The Defence of Byzantine Africa from Justinian to the Arab Conquest, 2 vols. (Oxford: B.A.R. International Series 99, 1981); and Fentress.

157.J. Baradez, Fossatum Africae, (Paris, 1949)

158.D. Van Berchem, L'Armée de Diocletian et la réform Constantienne (Paris, 1952). As cited in Fentress, 98.

159.Fentress, op. cit., 111-2.

160.Ibid., 116-7.

161.Pol Trousset, "De la montagne au désert: "limes" et maitrise de l'eau," in Désert et montagne au Maghreb: Hommage à Jean Dresch, R.O.M.M. 41-42 (1986), 90-118.

162.C. R. Whittaker, Frontiers of the Roman Empire: A Social and Economic Study, (Baltimore: Johns Hopkins University Press, 1994), 80-1.

163.Ibid., 145-51.

164.Shaw, "Nomad Menace," 46.

165.Kehoe, 18.

166.Elizabeth Fentress, "The Economy of an Inland City: Sétif," L'Afrique dans l'occident Romain, 117-28.

167.G.W.Barker and G.D.B. Jones, "The UNESCO Valleys Survey 1979-1981: Palaeoeconomy and Environmental Archaeology in the Pre-Desert," Libyan Studies, 13 (1982), 8.

168.Susan Raven, Rome in Africa, (London and New York: Longman, 1984). Unless otherwise noted, all the general information on antiquity in North Africa comes from this book.

169.Barker and Jones, "UNESCO Libyan Valleys Survey 1979-81."

170.Shaw, "Water," 164.

171.Ibid., 170-1.

172.See Denis Kehoe, op. cit.

173.Shaw, "Water," 171.

174.Michael Fulford, "Pottery and the Economy of Carthage and its Hinterland,"Opus, II, (1983), 5-14.

175.Fulford, 9.

176.See R.C.C. Law, "The Garamantes and Trans-Saharan Enterprise in Classical Times," Journal of African History, VIII, 2(1967), 181-200; P. Salama, "Le Sahara pendant l'Antiquité classique," Histoire Generale de l"Afrique, II. Afrique ancienne, (UNESCO,1980), 553-74; and, Timothy F. Garrard, "Myth and Metrology: the Early Trans-Saharan Gold Trade," Journal of African History, 23 (1982), 443-61.

These are only a few of the dozens of articles and books. These articles give a good survey of the literature.

177.Law, op. cit., 181-2.

178.Salama, op. cit., 556-7.

179.Law, op. cit., 188.

180.Garrard, op. cit., 446.

181.Ibid., 445.

182.Ibid., 447. Garrard cites the Theodosian Code, 13. I. 8; 13. I. 17-8, 12. 6. 39, 13. I. 19.

183.Ibid., 448.

184.Ibid., 448.

185.Ibid., 449.

186.Ibid., 451.

187.Ibid., 459-61. See Merrick Posnansky, "Aspects of Early West African Trade," in World Archeology, 5, no. 2 (1973), 149-61. Mark Dyer in a paper presented at a conference in Tripoli in October, 1979 on Trans-Saharan Trade entitled "Central Saharan Trade in the Early Islamic Centuries, 7th - 9th centuries A.D." also does not resolve this issue.

188.Mattingly, "Libyans and the 'limes' : Culture and Society in Roman Tripolitania," Antiquites africaine, 23 (1987), 91.

189.Denys Pringle,The Defense of Byzantine Africa from Justinian to the Arab Conquest, Part i, (BAR International Series 99(i), 1981), 113.

190.Ibid., 114.

191.Ibid., 115.

192.Pringle, 167.

193.Kehoe, op. cit., 3.

CHAPTER 3

ZARBIYA

Ifrîqîya fî waqt al-Islâm

An Approximate Picture of the Economy of Ifrîqîya

"So they possessed your land in both its open spaces, having encompassed it from both sides.And they joined your two wings to the heart in death's embrace,... The forefeathers and the feathers hidden beneath the wing..."[1]

The history of the Maghrib is often characterized as "Arab" history; but in truth, it is the history of the Berbers. The Arab Conquest, despite its long lasting effects on the language, religion, and politics of the Maghrib, did not mean Arab rule for any length of time. Approximately one hundred years after the first Arab campaign into Tripoli in 645 A.D., the Berbers rebelled. And, by 757, Khârijî Berbers had gained control of Tripolitania. In the succeeding centuries, primarily Berber dynasties were established across the Maghrib, who,

at times acknowledged the Umayyads or Abbasids, and at others formed alliances with Arab lineages/tribes in the Maghrib. It is this characteristic of Maghribi history that Yves Lacoste refers to when he states: "North Africa is very different from the rest of the medieval Muslim world."[2] But, under the layers of acculturation: the adoption of the Arabic language and Islamic law and mores, intermarriage, and the veil of history, the Berbers have often been forgotten.

It is from Arab geographers, travellers and chroniclers that much of our information about the early history of the Islamic Maghrib is derived. In these accounts, the Berbers are represented by their clan/tribal names as groups and not as individuals. Many of the earliest Arab accounts of the Maghrib date from several centuries after the conquest, and the majority never even visited Ifrîqîya. It is to Ibâḍî accounts or biographical compendia that we must turn for insight into what must have been the majority of the population, their activities, and interests. None of these accounts, however, give us a clear indication of the "general characteristics and fundamental structures" of the economy of the "medieval" Maghrib. Despite this difficulty, Yves Lacoste, in his book on Ibn Khaldûn, tries to identify the type of economic system prevalent in the Maghrib. He, and Abdullah Laroui are the only ones who have approached this

task.

Lacoste associates the economy of the medieval Maghrib with a variation of Marx's "asiatic mode of production" which had: 1."the insertion of the vast majority of the population into autarchic or semi-autarchic village or tribal communities; 2. the presence of a privileged minority whose members accumulated large profits but had no right to the private ownership of the means of production."[3] However, according to Lacoste, it did not fit the typical "Asian" mode of production because it was not a hydraulic society with large-scale irrigation works even though the Medjerda valley in Ifrîqîya could have been "irrigated and used for agriculture."[4] He attributes this to the size of the available labor force (too small), "the prevalence of a pastoral or semi-pastoral way of life," and the strength of "tribal structures" which prevented the rulers from subjugating the population.[5] He admits, however, that the Romans may have done this. Maghribi society for Lacoste was characterized by "a combination of the structures of military democracy and trade" whose profits are derived from the appropriation of surplus value from a "low level of production."[6] It is only as an "intermediary between productive societies" that the Maghrib garnered any wealth. This type of economy Lacoste terms an "artificial economy," which is likely to collapse when trade routes

are disrupted or by-passed.[7]

This picture of the medieval Maghrib is flawed in several respects. K. N. Chaudhuri was correct to remind his fellow scholars that actually, the "historical theory known as 'Oriental Despotism'...re-emerged in the writings of Marx as the 'Asiatic Mode of Production'."[8] Why must all societies other than feudal Europe, be part of the "Asiatic" system? This theory tends to characterize the East as ruled by despotic leaders, who controlled production and access to land. This is not true for the Maghrib, where often leaders ruled by forming alliances and only had control of resources and revenues through the establishment of toll stops, import and export regulations, and iqta' in areas directly under their jurisdiction. For much of Maghribi history, states were often no more than extended city-states, or loose confederations. Production was not directed, though it was often collected, by the government. Second, the Maghrib may not have been a "hydraulic society," but the use of irrigation systems controlled by local officials were common, such as the buying of time units for irrigation in Tozeur in southern Ifrîqîya. Also, the Medjerda valley and other regions along the Mediterranean coast often received enough rain not to need large scale irrigation works; and the Sahil already had indigenous irrigation schemes which produced high yields provided that agriculturalists were

protected. The "Asian mode of production" based on irrigation was not needed. Islamic law had mechanisms for dealing with land, irrigation, taxes, and inheritance which did not require centralized administration. Another problem with Lacoste's interpretation is that we have no studies, except a single article by Mohamed Talbi,[9] which have been done on village or tribal life in the medieval Maghrib and which deal with land ownership, agriculture or production. Whether the majority of the population lived in tribal/pastoral confederations, agricultural villages, or in urban centers has not been determined. Medieval travellers have described numerous villages and settled groups which produced goods for sale in market centers across North Africa, a finding in keeping with patterns in the Roman period. And finally, the Maghribis were not just middlemen in Saharan and Mediterranean trade. Many of the products sold across sea and sand were produced or grown in North Africa: wheat, oil, soap, silk, fabrics, indigo, saffron, cumin, dried fruits, pottery, glassware, leather goods, coral, iron, wood, salt, and sugar. Therefore, it seems premature to conclude what "mode of production" dominated the medieval Maghrib.

Abdullah Laroui, in his critique of scholarship on the Maghrib, admitted that scholars of the medieval Maghrib faced both a lack of "explicit documents and numismatic evidence" when they attempted to describe

economic life.[10] However, he suggested that there were several patterns dominating the economy. First, aboriculture, and to a lesser extent, agriculture were highly developed in the Maghrib. Second, mining and manufacturing were flourishing. And third, internal trade in manufactured and agricultural items was "constant," and external trade, especially across the Sahara, was quite profitable.[11] All of this, though, is well known; except Talbi has asserted in his work on ninth century landholding in Ifrîqîya that "agricultural production had been maintained at a highly satisfactory level" with the help of a large irrigation system, at least until the famines of the eleventh century.[12] Moreover, Laroui stated that this dual economy: agriculture and trade, not nomadism and agriculture, formed the basis of "economic-social contradictions." Here he based his argument on the idea that only agriculture and commerce were taxed in the ninth century.[13] However, in the tenth century, the Risâla of Ibn Abî Zayd al-Qayrawânî specifically deals with a tax on animals such as camels. And, Ibn Ḥawqal mentions that some of the revenues of the city of Surt came from taxes on camels and other animals, and that there was ʿushr, kharâj and qawânîn on cattle and sheep sold at Sijilmâsa.[14] Idris, in his work on the Zîrîds, mentions a tax on pasturage rights (marâʿî)[15] Zakât was also collected in the twelfth century on flocks. So, the

conclusion that there was no tax on pastoral products/nomads, given the evidence, is incorrect. It is probably more accurate to portray the economy of the Maghrib as having many sectors: agricultural, commercial, industrial/artisanal, and pastoral, whose relative importance varied over time according to political and economic conditions.

To venture an analysis of economic structures in medieval Ifrîqîya is perhaps foolhardy since it presupposes the existence of statistics, which are almost non-existent in the historical accounts. There are no population counts, tax lists, or diwân registers which have come down to us. That these did exist at one time is without question; however, all that is left are the occasional references in geographical and historical accounts, collections of fatwâs, and biographies. So, all we have are fragments, many of which may have been altered, especially by rounding off, to fit the exigencies of history. S. D. Goitein stated bluntly, that "the study of prices...in Arabic literary sources is like attempting to solve an equation with four unknowns."[16] For instance, the Mi'yâr of Wansharîsî records some of the taxes levied on goods in Qayrawân in the tenth century: two dinars for each partner in an oil press,[17]; in Mahdîya in the twelfth century: five dinars in taxes on ten qafîz of sumac sent to Sicily.[18] But there are no records which

include all the other taxes.

We have no data relating to population. Mohamed Talbi has estimated that until the eleventh century only "several tens of thousands, possibly a hundred thousand or a hundred-and-fifty thousand" Arabs lived in Ifrîqîya. And, one fifth of the population in cities were slaves.[19] Both of these numbers are meaningless if we have no estimates of the general population. How can this be done without access to census or tax documents? Estimated households per square mile for cities, or possible use of facilities like baths could give some inkling. For instance, under the Zîrîds, Qayrawân had forty-eight baths.[20] Al-Sabra had 300.[21] But, how many households per bath? How many people per dwelling? Can we compare household size in Qayrawân with that in Fustat for which we may have better data? Probably not. For the feast of 'âshûra', al-Bakrî counted 950 slaughtered animals.[22] But how many households per animal? Perhaps we could count the number of men in the military? However, the historical accounts like to round these off to the nearest thousand or ten thousand, preferably in increments of three: 30,000, or 10,000.[23] Depending on whether the battle was lost (the numbers on the author's side will be less than the opposition) or won, the numbers will have been altered. Later authors may have no reason to lie, as Chalmeta has suggested in his article on Andalusi medieval

economy in The Legacy of Medieval Spain, but neither do they necessarily have access to the original lists of taxes and population figures.[24]

The sources available to study the economy of the medieval Maghrib fall into several categories: geographies, chronicles, riḥla, legal texts, and biographies. The data recorded by geographers, chroniclers, and travellers has a degree of repetitiveness over the first several centuries of Islam in Ifrîqîya. We can, at the very most, compile lists of products, specialties of regions, irrigation techniques, and trading activities, without, however, assuming any degree of accuracy as to historical period. Often the accounts use information from many centuries previous as if it were the present. Later scholars have sometimes lumped all the accounts together indiscriminantly without considering the differences relating to the time periods in which they were written. Legal texts provide invaluable information about business practices, landholding, and agricultural techniques; however, it is up to the researcher to abstract the meaningful material from the legal cases. Biographies can give details about occupations, property, and economic status; but, often they are written in a formulaic fashion to enhance the image of the person described. Given the limitations of the sources, it is not the task here to give a micro-analysis of the economy of

Ifrîqîya in the medieval period, but to trace economic activities; that is those norms and institutions which are "connected with production, circulation, apportioning and consumption of goods and services..."[25] This is not an exhaustive presentation, but certain elements related to agricultural, pastoral and industrial production will be examined in an effort to explain how the economy functioned: what was produced and where, whether it was an individual or joint undertaking, directed by the state or the individuals; and what techniques were employed. How were goods circulated and redistributed: consumption by the producer, sale, theft, alms, habus, or inheritance? How were these institutions shaped by legal regulations regarding property, commerce, irrigation, banking, and exchange? To this end, there will be a discussion of the sources and the information they provide; an attempt to verify the accuracy of the material presented; and an analysis of the material in order to set out a synthesis of patterns of production, distribution, consumption and regulation. This will be divided into two sections: a chronology of economic development and diffusion provided by the accounts of geographers and chroniclers; and a thematic treatment of legal texts, biographies, and the Geniza documents.

Dynamics of Conquest, Settlement, and Economic Development as Provided by Geographers, and Chroniclers of the Medieval Maghrib

The first accounts of the Arab conquest and the first century of Islam in Ifrîqîya have a small amount of information related to the economy. Primarily they include the accounts of battles, treaties, and anecdotes. The first chronicler with any details concerning eastern Ifrîqîya is Ibn ʿAbd al-Ḥakam (187/803-257/871). His is a "traditionist's" history in that he gives the chain of transmission of different stories, but he does not attempt to make a coherent narrative.[26] He was most interested in the status of the conquered lands according to Islamic law, and less concerned with an accurate account of the land or its people. This perhaps was a futile task, given that the most famous jurist of medieval Ifrîqîya, Saḥnûn (160-240/777-854), admitted that knowledge about the legal status of lands in the Maghrib, whether ʿanwa or ṣulḥ, was uncertain.[27] But the concern about the status of such lands is understandable given that the inhabitants and their property could be treated accordingly. Thus, Ibn ʿAbd al-Ḥakam carefully cites the conditions of surrender of Barqa to ʿAmr ibn al-ʿÂṣ in 643-4 which resulted in the payment of an annual tribute of 13,000 dinars to be given

in children or dinars.[28] This tribute in children was levied throughout the Maghrib; however, by the 700's it had been abandoned in favor of taxation and the capture or purchase of slaves. The inhabitants still maintained control over the land. The problem of land in the hands of the Berbers who paid a lump sum tribute was addressed by Ḥassân b. al-Nuʿmân, "who, after his definitive victory (78/697-98), drew up a system of land classification;" and introduced the idea of imposing kharâj on those who had maintained control of their own land.[29] He also distributed land to Arabs and to Berbers allied with him as estates, out of the profits of which they presumably got their salaries and maintained their families or clans. He also ordered the destruction of Carthage, and the building of a new port, canal, and arsenal at Tunis for which a thousand Copts were sent from Egypt. Ḥassan was replaced in 85/704 by Mûsâ b. Nuṣayr, who completed the conquest of the Maghrib. In al-Mâlikî's Riyâḍ al-nufûs, there are several examples of men linked to Mûsâ b. Nuṣayr, after he became governor in the Maghrib in 85/704, who had control of whole villages which had been awarded to them.[30] These large awards were probably similar to qaṭîʿa. However, along with the large estates, medium and small properties also existed. In fact, "in the Sahel and in the province of Tripoli they even predominated." Talbi suggests that in these regions the Arabs may have left the

original landholders in control.[31] Early Ibâḍî accounts refer to small landowners and farmers, and many farmers appear in cases regarding irrigation disputes in the fatwâs of the Mi'yâr.

It is, as well, from 'Abd al-Ḥakam's account that we get the famous story of the wealth of Ifrîqîya resting in the lowly olive. The story concerns 'Abd Allâh b. Sa'd, who demanded of one of the Afâriqa what the source of his money was, and he showed him an olive and stated that the Rûm came to buy oil from them and they sold it. The name Afâriqa, he stated, was used for the people who lived in the region between Barqa and Ifrîqîya.[32] In fact, the term is still used today in Tunisia to refer to North Africans in general. Whether this is an apocryphal anecdote or not, it does indicate that by the time of the author, this region was known to have produced enough oil to make the inhabitants wealthy through trade with the Rûm. Al-Halîm also recounted how in 647-8, an Arab expedition which resulted in the death of Gregory, the Byzantine governor of Ifrîqîya found that "their riches consisted for the most part of gold. They asked them about this gold and how they acquired it." And, they responded: "From the sale of oil."[33] This production of olive oil was continued after the Arab conquest.

On these campaigns, the Arabs acquired so much gold both in coin and gold-dust (tibr) as booty that it became

a problem as to how it should be divided. On one campaign, each horseman received 3,000 dinars, and foot soldiers got 1,000 dinars.[34] In 665-6, after an expedition further west, each soldier received 200 dinars. The next year, the Arabs attacked the caravan route to Khâwâr. This was the expedition to the Fazzân under ʿUqba b. Nâfiʿ which occurred in 666-7, in which he was accompanied by 400 horsemen, 400 camels, 800 waterskins, and allegedly reached as far as Kawâr (Khâwâr), deep in the Sahara, directly south of Tripoli and north of Lake Chad. There he imposed a tribute of 360 slaves on the king of Waddân and on the ruler of Kawâr as well. He returned to Barqa by way of Zawîla, a route in use in al-Bakrî's day.[35] Ibn ʿAbd al-Ḥakam also recounts the story of the expedition of Ḥabîb b. Abî ʿUbayda al-Fihrî in 734-5, under the direction of ʿUbayd Allâh, which campaigned in the Sûs in the western Maghrib from whence he preceded to the Sudan. "He attained success of which the like has never been seen and got as much gold as he wanted."[36] If this account is true, then the trans-Saharan routes mentioned in later accounts were known and used as early as the first century of Islam. T. Garrard takes this evidence as proof that "the gold trade did not spring into existence with the Arab conquest; by the mid-seventh century there was gold-dust and a great caravan route in Byzantine North Africa."[37] Of course, it is useful to remember that the

account of Ibn ʿAbd al-Ḥakam was written in the ninth century and probably inserted material from a later period into the account.

The story of the Fezzan expedition, and others in the Futûḥ, also mention the imposition of yearly quotas of people destined for slavery. These people were either shipped east by the tenth century to satisfy the need for laborers, work on estates and public works, or serve as courtesans for the caliphs.[38] That slaves were also used on large estates in the Maghrib is evident in the biographies in al-Mâlikî's Riyâḍ al-nufûs, such as that of the qâḍî of Ifrîqîya, al-Kinânî (d.214/829), who, when he was named to the office presented the people with all his possessions: slaves, and flocks, and stated that if they increased during his tenure in office, then the people could accuse him of corruption.[39]

The account of the conquest clearly indicates that the modus operandi of the early Arabs was to make agreements with the Berber tribes, sometimes incorporating them into their forces, or to force them into submission, before they attempted to fight the Byzantines along the coast. According to Laroui: "After 711/93 the Maghrib became theoretically a province of the Arab empire, providing soldiers and slaves, and paying tribute to fill the coffers of the caliph at Damascus."[40] However, the Berbers still maintained a degree of autonomy, and the

local leaders were recognized by the Arab government, represented by an amir in the new center of Qayrawân.[41] Thus, it is not likely that Arab rule changed the way of life of the Berbers to any great extent very rapidly. They continued to irrigate their fields and graze their flocks as they had before. According to Bulliet, people in Ifrîqîya still used wheeled carts in the medieval period. These carts were in use at least until the ninth century, as in 881-2 when the Aghlabid amîr of Ifrîqîya used carts with wheels to carry the bodies of massacre victims to a trench for disposal in the Zâb.[42] And in 894, carts were sent from Qayrawân to Tunis to bring back spoils after suppressing a revolt.[43] So transportation was probably still passing on the Roman made roads built for the use of such carts. The Berbers adopted Khârijî Islam in its Ṣufrî and Ibâḍî forms in some of the same regions were Donatism had been popular. By the mid-eighth century Khârijî merchants had established themselves in the towns along the Saharan fringe and engaged in a long distance trade network which shipped slaves from places like Zawîla to Tripoli and Qayrawân.[44] However, we do not have a clear picture of the economy of Ifrîqîya at this time.

By the eighth century, Muslims of Arab descent had settled in Ifrîqîya in urban centers and on large estates, some containing entire villages. However, according to Laroui, it was in the ninth century that "Islamization"

took place.[45] During this period commerce and agriculture flourished, and trade expanded across the Sahara. The first author to describe the region with any detail at this time was al-Ya'qûbî, who completed his Kitâb al-Buldân in 276/889-90. He was actually the first Arabic writer to travel to North Africa; and the first to include information on the Saharan trade routes, one passing through Zawîla and the other through Sijilmâsa.[46] By this time, the Aghlabids were well established in Ifrîqîya, and the Idrîsids ruled in Fez. The Khawârij, under whose instigation many of the eighth century Berber rebellions occurred in the Maghrib, had become entrenched in specific regions such as the Jabal Nafûsa in Tripolitania, the Sûs in the western Maghrib, and Ṭâhart, in the center. The Barghwâta of western Morocco (127/744), the Midrârids in Sijilmâsa (140/757), and the Rustamids (761) in Ṭâhart, established independent Khârijî states which lasted until the Fatimid ascendancy in the tenth century. Their influence extended to the Jabâl Nafûsa under the leadership of the Persian 'Abd al-Rahmân b. Rustam, a former Ibâḍî governor in Qayrawân. Most of the Ibâḍîs were Berbers, among them were Lawâta, Nafzâwa and Hawwari of western Tripolitania and the Jabal Nafûsa. They were spread far south into the Sahara to such places as Wargla, Tadmakkat, and Awdaghost in the Sudan.[47] Ibn Khurradâdhbih (205/820 -300/911) mentioned that the Ibâḍî

Rustamî controlled Tâhart, one month's march from Qayrawân by camel (ibil). The Khârijî Ṣufrîs controlled the Darʿa, a well populated town with a silver mine, to the south of which lived the Ḥabasha.[48] The chronicle of Ibn Ṣaghîr (wr. 290/902-3) contains references to this link with the Sudan as well; when Tâhart was founded, "the roads to the land of the Sudan and to all the countries of east and west were brought into use for trade..." [49] In these accounts it is commonplace to find individuals who are on their way to or from the Sudan.

Al-Yaʿqûbî's account includes information on the various Berber and Arab groups and where they settled, the types of soil and water sources, products, markets, taxes, routes and descriptions of cities and how they were organized. Similar to other writers who came after him, urban centers were listed in the order they were encountered en route, and he carefully differentiated the various types of water sources, where they were, and whether the water was used for drinking or irrigation. His account is like a traveller's guide through the desert, or a ninth century handbook for merchants, since the main characteristics mentioned for even the smallest village were whether it had good water, a market, and a defensive wall. His account is one of a fertile, green countryside and vibrant commercial centers.

Barqa, an important stop on the way from Egypt by

land or sea, is described as lying in the midst of a plain with red soil, and surrounded by villages mostly inhabited by Arabs from the time of the first invasions: ʿAzd, Lakhm, and tribes from Yemen. Some villages had Berber inhabitants: Luwâta, Zakûda, Mafraṭa, and Zenâra. The city itself was supplied by rainwater which came down off the mountains and was collected in cisterns founded by the caliphs and governors; however, some of the valleys nearby had springs, trees, fruits, fortresses and what he identified as Roman wells, though it is likely that they were built by the local Berber population. The area paid 24,000 dinars in taxes per year in quotas fixed per village, and 15,000 dinars in zakât, alms, and head tax. Since most of the villages were Berber, and the head tax was levied on many of them as well, they seem to have paid a considerable sum. He does not mention the exaction of human tribute from the Berbers which had been levied at the time of the conquest; no doubt it had long since ceased, although Berber slaves continued to be sent east along with a steadily increasing supply of bodies from the Sudan.[50] An anonymous tenth century Persian work, Ḥudûd al-ʿAlâm, refers to merchants from Egypt who went to the Sudan as well. These merchants would bring salt, glass, and lead to sell for their weight in gold; and they would steal children, castrate them and sell them as eunuchs (khâdimân).[51] This story may be exaggerated, but many of

the accounts contain strange stories on the acquisition of eunuchs.

From Barqa, al-Ya'qûbî proceeded along the coast and then south into the desert where he named areas which produced dates for export, such as Awjîla and Waddân. In later centuries these dates were exported to the south, since centers further north in Ifrîqîya, like Tozeur, were prolific producers of dozens of varieties of dates, some as large as eggs. Many of these oasis towns like Waddân did not pay any taxes and were administered by Berbers. These regions were seemingly independent from any government along the coast. Further south, on the route from Awjîla to Kawâr, was Zawîla, where grain, dates and leather were produced. Zawîla was inhabited by Ibâḍîs, many of whom came from the east, who traded in slaves from the Sudan. At Kawâr, fifteen days from here, the region was also inhabited by Muslims, mostly Berbers, who brought the slaves to be shipped to Zawîla. These may have been Khawârij as well, but it is not specified in the text. Between these two points was the land of the Lamṭa. It is possible to see that by the ninth century Ibâḍî influence and participation in the slave trade was already well established in this region. Ibâḍî sources mention their merchants as active in regions as far as Tâhart and al-Sûs al-Aqsa by this time.[52] Slaves were also owned by the Ibâḍîs themselves who used them for domestic or

agricultural labor. Many traders or pious men travelled with a slave, or are mentioned as having one in their household.

The region around Tripoli and the Jabâl Nafûsa was inhabited by Ibâḍîs, mostly Berbers, though the city of Tripoli itself had a mixed population. Ibâḍî communities first appeared in this region in the eighth century. Ibâḍî sources, such as al-Shammâkhî's Siyar (16th cent.), mention pious Ibâḍîs, some of them women, living in the region in the ninth century and later. One of these was the ninth century Manzû, a female "saint" who was encountered by a caravan from Jâdû passing through the Jabal Nafûsa.[53] Another was the eleventh century ʿAṣîl, who evidently wove her own cloth, since in a vision, she heard a voice bidding her to go to the mosque, and one of her rewards would be that she would wear garments that she had not woven.[54] Weaving seems to have been a common occupation among women; and many poor women would weave for others.[55] Ibâḍîs far from the coast did not pay any tax and had a lot of land with villages, farms, and fields.[56] M. Abuswa claimed that the sects of the Ṣufrîya and Ibâḍîya developed among those with similar economic roles: the merchants of the interior became the latter, and the Ṣufrîs of the north were agriculturalists.[57] Most likely, the Berbers of the interior, after being forced to pay tribute in the seventh century, reverted to a more

independent status later on, continuing to cultivate the soil and pasture their animals. The picture painted here is of small communities, immediately surrounded by tax paying agriculturalists and pastoralists, but with little control by any central government in the mountains and oases to the south. This same pattern of control had existed during the Roman period as well.

Travelling up the coast from the Jabâl Nafûsa brought medieval merchants and caravans to some of the most prosperous commercial and agricultural centers of Islamic Ifrîqîya. Al-Yaʿqûbî mentioned some of the important urban centers. The town of Gabes (Qabis), flourishing under the Aghlabids, had abundant trees, fruits, and water. The region around Gafsa, further inland, was a land of palms and olive orchards. Qayrawân, founded in 50 AH according to al-Yaʿqûbî, and 55 AH according to other authors,[58] was inhabited by a diverse population; Arab tribes of Muḍar, Rabîʿa, Qaḥḥân; Persians from Khurasan; Berbers; Greeks and others. Though al-Yaʿqûbî does not discuss it, by the ninth century, the city of Qayrawân was an important center for trade coming from the interior and going to the coast. Abuswa claims that one of the reasons for the establishment of the city was to divert trade from the coastal area, which in the first century of Islam was controlled by the Byzantines.[59] But trade still went through the other coastal centers under Arab control such

as Tripoli, Barqa, and Ajdabîya. It is likely that Qayrawân also served to control the Sahil, with its wheat and olives; and the Berber tribes. The land south of Qayrawân was a vast region filled with villages, olives, trees, vines and qsur.

Qayrawân had a system of reservoirs (mawâjil) to collect rainwater. This hydraulic system was the subject of an intensive study in the 1950's by M. Solignac, who surveyed the ruins of cisterns, wells, aqueducts, and irrigation systems throughout all of Byzacena. He concluded from this that the city of Qayrawân, and Ifrîqîya in general, was dominated by a politics of water.[60] In the period that he studied, Aghlabid, Fatimid, and Zirid, an ongoing process of building water systems was evident both in the historical accounts and the archeological remains. Some of these were strictly for the provision of water to the citizens of urban centers, like Qayrawân and al-Mahdîya. However, hundreds of them had been constructed for villages, farmers, and pastoralists. In fact, many of the cisterns to collect rainwater or the runoff of small streams or wadis were located along routes or near pastures where flocks would pass. In these areas there were no monumental water systems, but simple masonry basins to provide pastoralists with stops for their animals. This led Solignac to conclude that these water works were part of an intensive

"industrie pastorale" which provided the riches of the land.[61] What is interesting is that it is the management of irrigation water for crops which appears most often in legal debates, not that of animals; however, many of the early cisterns were not for irrigation. Al-Ya'qûbî confirms that pastoralism was important further inland from Qayrawân where the inhabitants were mostly independent farmers and pastoralists.

Mining was important in the early Maghrib. Four stages from Qayrawân was Majjâna, which had mines of antimony, silver, iron, and lead.[62] Al-Ya'qûbî is one of the first to give an account of the gold and silver mines of Tâmdult, further west near Sijilmâsa, and of the gold trade in the land of Sudan where Ghana was a source of gold.[63] How early the mines in the southern Atlas mountains were worked has yet to be determined by archaeologists. Rosenberger, in his article on Tâmdult, stated that the remains indicated that mining of silver had commenced, at least, by the end of the ninth century and had continued unabated until his day.[64] Al-Ya'qûbî described the gold "as growing like plants and it is said the wind blows it away."[65] Thus, by the ninth century there were two sources for gold: the Sudan and the mines of Tâmdult.

One of the first references to this gold in the Islamic texts is that in of al-Fazârî who lived in the

second half of the eighth century and is cited by al-Mas'ûdî. He mentioned Ghana as the land of gold.[66] Ibn al-Faqîh (290/903) gave the story of gold growing in Ghana like carrots in the sand,[67] a story which was repeated continually in the sources despite its inaccuracy. Al-Hamdânî (d. 334/945) said that the richest gold mine on earth is in Ghana: "Deserts and fear of the Sudân of the Maghrib bar the way to it. When anyone arrives there he loads his camels heavily because the veins, eyes, strips, sandals and tongues of gold... are numerous there and it is cut up and carried away."[68] Al-Mas'ûdî (wr. 336/947) also said that gold grew like plants in the land of the Sudan; and that there was a "silent trade" in gold where the merchants bargained without seeing or conversing with the people who brought the gold. "They leave their goods and on the next morning the people go to their goods and find bars of gold left beside each commodity. If the owner of the goods wishes, he chooses the gold and leaves the goods, or if he wishes to take his goods and leaves the gold. If he desires an increase he leaves both gold and goods."[69] Al-Muqaddasî (wr. 375-80/985-90) was more specific as to the location of the gold and silver mines near Sijilmâsa. The silver mines he located at Tâzrart and the gold mine between there and the Sudan.[70] Al-Muqaddasî also mentioned the Sudan gold trade. The inhabitants of the Sudan traded gold for salt or pieces of cloth which

were used as currency among some groups.[71] Al-Bîrûnî (d. after 442/1050) had a more scientific description of the gold. The gold of the Sudan was found in the shape of round beads. And merchants from Sijilmâsa traded pieces of a special cloth with red fringes and gold patterns called mubajbajât. The silent trade he attributed the language barrier between the traders.[72] None of them ever saw these mines; nor did they ever meet anyone who did.

Ibn Ḥawqal, another tenth century writer, compiled his Kitâb Ṣurat al-Arḍ after he met al-Iṣṭakhrî, and copied much of the latter's Kitâb al-masâlik wa al-mamâlik. Supposedly he visited the Maghrib in 336-40/947-51, but the extent of his travels is not certain. According to the Corpus, "his description of the Maghrib under the rule of the Fatimids betrays his sympathy for this dynasty, and he may well have been one of their agents."[73] Whether a Fatimid agent or not, Ibn Ḥawqal was definitely interested in commercial affairs. Barqa, of the red soil, was described as always full of merchandise and travellers. In fact, it was a center for trade. Wool and cloth were traded with foreign merchants, skins were exported to Egypt; dates arrived from Awjîla; wool, pepper, salt, honey, leather, oil, and eastern products were sold in its markets. Ajdabîya, further along the coast, was the center for the collection of revenues for the region: zakât, kharâj, tax on fields (fruits,

vegetables), tribute from Berbers, and tolls on caravans (including those coming from the Sudan) and ships. So Ajdabîya was an endpoint for trade caravans from all directions. He stated that the Berbers nearby cultivated their lands without irrigation, though this seems unlikely. Awjîla, further south and the first stop on the caravan route, contained vast date palms and was on a direct route to the Waddân.[74] Along the coast, Surt was surrounded by Berbers in the rainy season when they pastured their animals. Otherwise, the lands they cultivated were far from the city. Revenues of the city consisted of levies on camels, sheep, agricultural products, and caravans. The local governor was responsible for collecting the taxes, maintaining registers, and preventing fraud in the market.[75] Tripoli was a center for the collection of taxes on every camel, donkey, slave, sheep, or product which passed through the region. Ibn Ḥawqal described it as rich, fortified, and with suburbs and beautiful markets, which the government had moved inside the city walls. The region contained numerous villages with excellent fruits: pears, peaches. They exported top quality wool and fine fabrics in blue and brown from the Jabal Nafûsa. They shipped these by sea on boats which came from Byzantium and the Maghrib. In fact, the inhabitants were so eager for these boats to dock that they provided docking services for free.[76] The Jabal

Nafûsa itself had fortified villages, springs, grapes, figs, and barley. The scene here is definitely one of a lively economic life in which agricultural, pastoral and commercial sectors were interdependent.

Further up the coast, Ibn Ḥawqal places Gabes only six days march from Qayrawân. It was a town with running waters and trees whose branches were so heavily laden with fruit that they bent under the weight. In this region, many Berbers raised olives and produced much oil. The town itself, with its many markets was known for its production of wool, silk, and leather, which they tanned with leaves from the acacia tree. This leather was famous throughout the region for its softness and good smell. According to Ibn Ḥawqal, the inhabitants of Gabes had not yet become "arabized"; they were still Afâriqa. However, he is the first to mention Jews living in the town who paid their taxes and were targets of attacks, as merchants, from Khârijî's outside the city. Any traveller from Surt to Gabes had to beware of being attacked on the road by nomads who were "schismatics." There is mention of the Jewish community in Gabes in the Geniza documents as well.[77] These documents and responsa show that the Jews of Gabes in the tenth and eleventh century engaged in many activities besides trade and owned lands which they farmed. Some of them worked in agriculture, including the digging of irrigation canals. "A detailed description of

work in the fields in another place shows that the labor was performed by a gentile tenant. The Jewish landlord received a certain percentage of the crops like a rais or a feudal lord."[78] However, the Jews also worked their own fields; and the documents reveal the usual disputes over irrigation water, boundaries, abutment rights, and land purchases.[79] In many ways these are similar to disputes being brought before Muslim qâḍîs as well.

The Sahil was the most productive region in Ifrîqîya for olives. Sfax, at the time of Ibn Ḥawqal was the center of olive production. For one dinar it was possible to buy 60 to 100 qafîz of olives. Sfax had ports, ribâṭs, markets, water from cisterns, and a stone wall. It was also known for fishing. Much of its fruit came from Gabes.[80] Nearby, Mahdîya was a small town, only founded around the time of Ibn Ḥawqal, on the sea coast. It was a commercial center, possessing many houses, baths, funduqs, and gardens. Ibn Ḥawqal visited it in 336/947 and found that it was being abandoned by the upper class and ruling princes under attack by the Ibâdîs.[81] He was probably referring to the siege by Abû Yazîd, a Khârijî, who, after taking Tunis and Qayrawân, attacked al-Qâ'im, the second Fâtimid caliph in al-Mahdîya in 944. The Fatimids also had turned the Mâlikî jurists and scholars against them by their imposition of Shîʿî ideology, high taxes, and harsh treatment.

The northern regions of Ifrîqîya were entered by way of Sousse (Sûs), a port town, which had beautiful markets, fundugs, baths, spring water, and abundant fields in the surrounding region. At Manzil Bashu, not far away, blacks were living and working in the town. The name manzil was commonly attached to many of the land grants of the eighth and ninth century in Ifrîqîya, many of whom were worked by slave laborers.[82] Tunis, not as important at this time as it would become under the Hafsids, was known for its production of a beautiful polychrome glazed ceramic ware. Also, in the vicinity of Carthage many agricultural products were grown: safflower, honey, butter, grains, oil, hemp, and caraway. Cotton was exported to Qayrawân at a considerable profit.[83] The northern plain between Tabarqa and Beja had a lot of wheat, barley, and other grains growing in abundance. Tabarqa had become famous for the number of Andalusi merchants coming to trade. Nearby was the town of Marsa al-Kharaz, a center for coral production of the highest quality. Its production was so valuable that the Maghribi ruler had agents (umanâ') who controlled the harvest of the coral, and a nâẓir collected the taxes. This is one of the few accounts of government intervention in industrial production. There were special merchants to deal in the coral trade. And, at any one time over fifty boats were involved in the search for coral, each with about twenty men.[84]

Ibn Ḥawqal divided the Maghrib into two bands, one of about ten days march in width which was fertile, inhabited by villagers, and under the authority of the government. The rest, in the interior, along the deserts of Sijilmâsa, Audaghust and the Fezzan was inhabited by Berbers who lived a miserable existence. However, Ibn Ḥawqal has interesting details concerning the Berbers, whose wealth, he said, lay in the size of their flocks.[85] They shared pastures and regulated access to cultivated lands and water holes. Those who lived on the edge of the Sahara or in oases levied a toll on passing merchants for each camel load or on gold coming from the Sudan.[86] Ibn Ḥawqal includes information on the old caravan route which, before his time, used to go from Ghâna to Egypt, but it was abandoned for that of Sijilmâsa. The caravans from Sijilmâsa passed through regions inhabited by people from Iraq, most likely Ibâḍîs. "They, their children, and their trade flourish, their light caravans are constantly on the move and their heavy caravans are incessant to obtain enormous profits, fat gains, and abundant benefits."[87] The chronicle of the eleventh century Ibâḍî, Abû Zakarîya, has numerous tales of individuals travelling from the Jabal Nafûsa to Zawîla or to Wargla and then on to Sijilmâsa. Many of these journeys were for business, however some of them were for pilgrimage or by Ibâḍî pious figures visiting the various Ibâḍî enclaves in Jerba,

Wargla, Tozeur, Nafta, or other sites. On one occasion, Abû Zakarîya recounts the story of an Ibâḍî shaykh, Abû Nûḥ', who travelled to Zawîla. When he arrived he met a Jew at the home of one of his friends and he engaged him in a theological dispute on the nature of death.[88] Ibâḍî traders also went through Ajdâbiya where tolls were levied on caravans from the Sudan.[89] Ibn Ḥawqal mentions the relationship between Awdaghust and Ghana. Ghana needed the trade of Awdaghust "because of the salt which comes to them from the lands of Islam. They cannot do without this salt, of which one load, in the interior and more remote parts of the Sûdân, may fetch between 200 and 300 dinars."[90]

The Maghrib was known as well for its exports to the east of beautiful female Berber slaves, who were the favorites of the Abbasid rulers. Also, European slaves, amber, silk, fine wool clothing, leather goods, iron, lead, mercury, black slaves, and many different kinds of animals: camels, mules, etc. were exported from the Maghrib.[91] This description of commercial life does not fit with Laroui's reading of the same author. He states that the land that Ibn Ḥawqal described seemed to have no urban artisans, and traded only in agricultural commodities.[92] As can be seen here, there were many craft industries.

Al-Muqaddasî, in his description of the Maghrib

(completed 380/990), repeated a great deal of Ibn Ḥawqal. However, he added some interesting details regarding trade. His account of Qayrawân mentioned that it was a center for trade by land or sea, where prices for food were low: one dirham for five manâ (two riṭls[93]) of meat. Qayrawân had many oil storage reservoirs. But, oil has only a short storage life, so it seems an unusual practice unless this was meant for newly pressed oil. However, in his day, the merchants had been so heavily taxed that many of them left their shops and went to Ṣabra nearby. The city of Sabra was supplied by water from mawâjin, ṣahârîj (basins) to collect rainwater, and a qanât built under the ground during the rule of al-Muʿizz in 337/948, which carried water from the mountains to fill the reservoirs after it entered the palace at Ṣabra.[94] Qanâts were one of the major irrigation techniques introduced by the Arabs, along with the noria.

A description of events in the life of al-Muʿizz in Ibn Khallikân's biographical dictionary adds some further details on conditions in Ifrîqîya under the Fatimids (succeeded by Zirids in 973). Upon taking over after the death of his father in 341/953, al-Muʿizz set out to visit his domains in Ifrîqîya. He placed a large army under the control of Abû al-Ḥasan Jawhar, who went to subdue Fez and Sijilmâsa. When the governor of Egypt died, Al-Muʿizz sent Jawhar to conquer it. Jawhar collected the astonishing

amount of 500,000 dinars in tax from the Berbers, and a large army of Arabs and Berbers, each of whom were paid from 20 to 1,000 dinars before setting out. The soldiers spent their money in Sabra and Qayrawân preparing for the journey. Jawhar took the army and 1,000 camels loaded with money and arms and departed for Egypt. He conquered Egypt, which had been weakened by the plague; and al-Muʿizz departed for Egypt in 361/972 after appointing Bulluggîn b. Zîrî as his representative in Ifrîqîya.[95]

In a section on commerce, Al-Muqaddasî enumerates the exports of the region: wool and clothing from Barqa; oil, pistachios, safran, almonds, and leather from Ifrîqîya; and coral from Marsa al-Kharaz. This work contains a detailed description of the collecting of coral: people went out in boats with a piece of wood in the shape of a cross to which they attached pieces of cloth. Each cross was attached to two ropes held by two men. They would throw the cross into the water and pull it until the fabric and wood got caught in a coral reef. Then they pulled until the coral broke, and they pulled it out. They gathered quantities ranging in value from 10,000 to 10 dirhams. The coral was then polished in special workshops and sold.[96] This process is referred to by Ibn Ḥawqal as well and testifies to a well developed industry for the harvesting and finishing of fine coral - an industry which is still lucrative in Tunisia today.

One of the most praised of the early sources is the Andalusian al-Bakrî (d. 487/1091), even though he never visited North Africa, and relied on informants and the work of al-Warrâq. Al-Warrâq, an Andalusi, lived in Qayrawân for many years, then returned to Cordoba and died there in 363/973. Al-Bakrî repeated much of the information provided by earlier authors without, however, always differentiating past and present. He described Barqa as flourishing and inexpensive, with a trade in the export of honey, wool and tar (qaṭrân) to Egypt. The tar was produced in a mountain village where nuts, oranges, and other fruits were grown. An immense forest covered the area beyond the village. The region around Barqa was inhabited by Luwâta and Afâriq Berbers. The route from Barqa to the west crossed the Wadî Masûs, which had many ruined cisterns and wells (jibâb), some 360 of them. In this valley there was a special earth (turba) which was used to ferment honey. However, by his time, the Hilali Arabs should have already been in Barqa. Of them, he has no mention.

The next major stop on the coastal caravan route, Ajdâbiya, had few gardens, soil as hard as a rock and wells and springs of sweet water. The town had markets, baths and fanâdiq (hostels). The inhabitants were mostly Copts and Luwâta Berbers.[97] Here it is possible to see, that by the eleventh century (or tenth century depending

on al-Bakri's informant) this region was still largely inhabited by Berbers. Surt was notable for having the best goat meat on the route to Egypt, as well as numerous wells, cisterns, gardens, dates, and aswâq. However, the people, according to al-Bakrî, were the most ignornant that God ever created, because they engaged in price fixing. They also spoke a language which was not recognizable, perhaps a remnant of Lybian or Punic.[98]

Tripoli (Atrâbulus/Ṭarâbulus al-Gharb), as described by al-Bakrî, was a well fortified city with "the three essentials of urban life, a great mosque, markets and public baths." It became independent in the beginning of the eleventh century because of a dispute between the Fatimids and the Zirids over the right to appoint the governor. However, the Banû Khazrûn, of the Zanâta, from the western Maghrib, intervened and by 1025, they had gained control of the city. The independence of Tripoli marked a wave of fragmentation which spread across the Maghrib by the 1050's. Tripoli fell to the Zughba in 429/1037-8 when they killed Sa'îd b. Khazrûn, the Zanâta lord of Tripoli.[99] The Zughba were a branch of the Banû Hilâl. According to most historians they should not have been here until the 1050's; however, Michael Brett contends that the movement of the Banu Hilal is indicated in the texts by the time of Ibn Ḥawqal, when they were moving into the Wahât; and by 1037 "an ordinary bedouin

population had shifted to become a factor of some military, and therefore political significance in the coastlands of the Mediterranean."[100] By the 1040's, the Zirids under sultan Mu'izz, were facing Ibâḍî insurrections in the south and along the route to Tripoli, undoubtedly affecting the security of the caravan route.[101] After the defeat of the Zirids in 1052 by the Banu Hilal at the battle of Ḥaydarân, the Zirids moved to Mahdîya and most of the other cities in Ifrîqîya became city states.

These changes are not reflected in al-Bakrî, and thus his description probably refers to some time previous to these events. In his description, Tripoli had many Copts and ribâṭs with pious men. It was near a sibkha from which salt was extracted.[102] In the plain outside of Tripoli, grain was produced in quantities of one hundred grains for each one planted. This high a yield in such a dry region indicates that it was very likely that irrigation techniques similar to those found by the Libyan Valleys Survey for the Roman period were probably used. And, in the Jabal Nafûsa there were ḥuṣûn, markets, olives, fruit, dates and a town called Jâdû where many Jews lived, though most of the inhabitants of this region were Ibâḍîya.[103] From the Jabal there was a route to Zawîla which passed through the mountain village of Tîrî with its dates and wells; and nine days later the traveller arrived in Sibâb

where a plant grew which produced the dye called _nîl_ or indigo.[104] Indigo was important both as an item of trade and in the production of dyed cloth. On leaving Sibâb, there was a desert of fine sand and one day march to Zawîla. It was from here that caravans left for the Sudan; and it was amply supplied with baths, markets, mosques, and dates, which were irrigated by means of camels. Probably this is a reference to a system whereby animals pulled buckets up from wells to fill irrigation canals such as is mentioned for the field around Qayrawân; however, there is no explanation in the text. From Zawîla slaves were bought with pieces of red cloth and shipped north. The story of red cloth being used as a currency in the slave trade is common in almost all the later texts which refer to the slave trade in this region. The trail then continued to Waddân and Kânim. On the return trip, there was an alternate route from Zawîla through Zalhâ and on to Surt. There was also a route from Tripoli to Ghirza and then to Waddân.[105] This route must have been used often at this time, since archaeological remains at Ghirza of a merchant's shop or storage room attest to trade in Bani Hammad ware from the Qalʿa Bani Hammad (Algeria) which was founded in 1007 and abandoned around 1150. This same ceramic ware has been found at Surt too.[106] Al-Bakrî described as well a route across the desert to Nubia which commenced in Awjila and passed through Al-Wâḥât (the

oases) in Egypt. This route was abandoned by the time of Al-Idrîsî due to sand storms covering the markers, a common occurance in the regions of the Sahara with "shifting" sands.

Al-Bakrî includes a detailed account of the Sudan which is invaluable. Zawîla was the center of the slave trade for Ifrîqîya where slaves were purchased with short pieces of red cloth. In his account there was a trade route which went from Sijilmâsa to Tâmdult (eleven stages) and to Awdaghust (forty stages) which was marked by sand, wells and towns along the way. Above Awdaghust was a mountain upon which grew a tree which produced a gum (ṣamagh) which was exported to Spain to use in the production of silk brocades. The town of Awdaghust was described as large and prosperous. Dates, sorghum, cucumbers, figs, and henna were grown there. Cattle and sheep were raised nearby. All their transactions were in gold. They imported wheat, which was consumed by the wealthy. Most of the inhabitants were from Ifrîqîya and from various Berber tribes: Barqajâna, Nafûsa, Lawâta, Zanâta and Nafzâwa. The beauty and skills of the slave women were praised by al-Bakrî.[107] From Awdaghust to Qayrawân was 110 stages. Copper mined and cast in the mountains near Îglî in the Sûs region was sold in the Sudan.[108] There was another trade route from Wâdî Darʿa to Ghana which by-passed Awdaghust and passed through many

dangerous deserts where it was days before water could be found. Along this route, adjoining that of Sijilmâsa to Ghana, was a large salt mine at Tâtantâl. The salt was exported to Sijilmâsa, Ghana and other lands in the Sudan. It had enormous quantities and merchants were constantly arriving to buy it. Precious stones were also in these mines. A second large salt mine was at Awlâl, along the coast near Takrûr.[109] He has a detailed description of the kingdom of Ghana and the caravan routes from Takrûr to the interior which reached Tâdmakka and turned north to eventually reach Qayrawân. However, from Tâdmakka to Wârgalân was fifty days in the desert[110] on the route which ended up in Qayrawân passing by way of Qasṭîliya. Another route went from Tâdmakka to Ghadâmis and then to Tripoli. Along this route was Bûnû where alum was mined and exported[111].

From Tripoli, Al-Bakrî takes the traveller along the coastal route to Gabes (Qâbis) with its stone walls, ḥuṣn, suburbs, markets, funduqs, mosque, baths, and moat. Here mulberry trees were grown to produce silk. According to Al-Bakrî they got more silk from one tree than five in other lands. He stated that this was the only place which produced silk in Ifrîqîya. Also, sugar cane was grown in this region.[112] Both of these crops are labor intensive but we have few references to their management and production processes. The island of Jerba was mentioned as

a Khârijî stronghold, and possibly a center of piracy since the inhabitants attacked people on land and sea.[113] The route then passed by Sfax via ʿAyn al-Zaytûn, which was guarded by a group of government officials in order to extract taxes from all who passed by. A similar toll stop was located on the road from Tripoli to Gabes to collect duties on caravans of traders and pilgrims. It is interesting that no such government tolls are mentioned for the Saharan routes. Any taxes on traders in these regions were either exactions from Berber tribes for safe passage or extracted by officials further south for rulers in the many kingdoms of the Sudan. Sfax was praised for its oil, which was sent to Egypt, Sicily, Europe and other places in the Maghrib. Thus, the commodity trade that made the Romans rich was important centuries later. People at Sfax also practiced qiṣâra (fulling) and kimâda (pressing/glossing) of cloth similar to that in Alexandria, but even better. The island off Sfax, Kerkenna, was a place where the people of Sfax pastured their animals.[114] This seems odd, since a trip by ferry to this island today takes several hours, the terrain is mostly barren, and the inhabitants live off fishing and tourists.

Qayrawân is described in all these accounts in great detail, even more so than Tripoli or Tunis. Al-Bakrî states that it was surrounded by fertile land which produced a return of one to one hundred in good years. A

sibkha where salt was produced was to the east. Salt was an important item in the diet of people and animals; and it was in much demand both in the Sahara and across the Mediterranean. However, there are few accounts which mention salt from Ifrîqîya as an item of trade, though there are detailed accounts of a trade in Saharan salts for gold in Ghana and Kawâr. During the time of the Zirids, Qayrawân was well known as a center for the manufacture of leather goods.[115] This has been verified by the work of George Marcais and Louis Poinssot on the embossed leather, glass, metalwork and jewelry of Qayrawân remaining from the ninth through twelfth centuries. They state that they also found the remains of glass works outside of Qayrawân, Ṣabra, and al-Mahdîya, including glass furnaces.[116] Al-Bakrî's detailed description of the city shows how concerned the rulers were with tax collecting since no merchant or traveller could bring goods into the city without paying duties. This indicates the difficulties involved in collecting taxes other than those on goods to be sold at market. However, under the Fatimids, the suqs had been moved to the suburb of Ṣabra, called al-Manṣûrîya by the Fatimids in 337/948-9 when they chose it as their capital. Every day, under the Zirids, 26,000 dirhams were collected at one of the fourteen gates at Qayrawân. A fatwâ from al-Qâbisî (d. 403/1012) of Qayrawan mentions such taxes as marâṣid on travellers,

duties at the gates, and mukûs on goods.[117] But, in 1057, before the writing of al-Bakrî, the city had been attacked, the people taken into captivity, and only the poor were left;[118] so it is likely that this sum was collected before the sacking of the city. Nor does al-Bakrî mention the famines and epidemics of 395/1004-5 in his account. According to the eyewitness account of al-Raqîq, famine, plague (ṭâʿûn), epidemics, (wabâ'), inflation, and misery descended on Ifrîqîya; and people fled Qayrawân.[119] Thus, the eleventh century was one in which blow after blow was struck to the economy of Qayrawân, and the Jewish merchants left for Cairo to engage in the Indian Ocean trade. According to M. Talbi, "...the Hilalians delivered a severe blow to an economy that was already seriously ailing. They precipitated the transformation of an economy, traditionally agricultural and urban but undoubtedly in a state of crisis, into a largely pastoral economy..."[120]

Raqqada, the residence of the early Aghlabids, had gradually fallen into decay by Al-Bakrî's time.[121] Mahdîya, near the sea, had 360 cisterns and water flowing in qanâts. The city was visited by boats from Alexandria, Syria, Andalus, etc. Past Qayrawân to Jalûla were ruins, wells and beautiful orchards. Near Sardâniya, thousands of orange trees were grown, as was sugar cane.[122] Near Ketama, there were mines of lapis lazuli, copper and

iron.[123] Sûs was known for its many weavers, and artisans who produced a gold thread. The Sahil region produced much wheat and barley as well. The kharâj of the Sahil (from Tunis to Sfax) amounted to 80,000 mithqâls.[124] Garrard has determined that a mithqâl of gold dust weighed between 4.4-4.5 grams of gold, and corresponded to the Roman solidus.[125] However, if this reference is to coinage, the mithqâl could have been 6, 6 2/3, 7 or 8 to a Roman ounce (26.9 - 27.3 grams).[126] This means that the revenues of the region may have amounted to 320,000 ounces of gold, quite a considerable sum. Thus, since the tax was paid in gold, it is likely that gold was plentiful at the time. Outside of Tunis, in the Jabal al-Tûba, villages with olive and fruit orchards predominated. A number of the gardens outside Tunis used siwâni to irrigate them. Salt, perfect fruits, and ceramic ware were produced there as well.[127]

Further south and nearer to the desert lay Gafsa (Qafsa), Tozeur and Qastilîya. In Qafsa pistachios were grown and exported. It's annual taxes amounted to 50,000 dinars. The village nearby, named Turaq, was the site of a cloth industry and produced cloth called turaqî which was sold in Egypt. The oasis of Tûzur (Tozeur) was a center for the production of dates and a stop for caravans and pastoralists from the south. Every day, 1000 camels exited Tozeur with dates.[128] In the region of Tozeur,

there were three streams which formed six canals; and these branched into innumerable qanâts constructed out of stone in a uniform manner and all the same size. In order to regulate the flow of water, people paid one mithqâl per year for four âqdâs of water, which were measured exactly. The qadas consisted of using a pail with a small hole, which was filled with water and suspended until the water dripped out, as a water clock. The canal was allowed to let water into the garden as long as the pail dripped. When it stopped, one qadas of water had been used.[129] This method of water regulation must have required a great deal of planning and oversight, as well as contributing to the productivity of the region. Tax revenues in the region of Qastilîya were 200,000 dinars.[130] However, whether this land was privately owned, or iqtâʿ is not clear. Idris, in his work on the Zirids, stated that in the time of the Zirids they did not award iqtâʿ in the region of Qastilîya because they did not have a tight control over it.[131]

It is in al-Idrîsî's Nuzhat al-mushtâq that changes in the economy of Ifrîqîya are most evident. Al-Idrîsî, as a descendant of the Banû Ḥammûd of Malaga and the Idrîsids of the western Maghrib, was probably a Maghribi. He completed his work in 548/1154 at the request of Roger II of Sicily, after the attack of the Normans on Tripoli in 1146, and their war with Mahdîya in 1148. Only Tunis

retained its independence, although it too paid tribute to the Normans. At this time, according to Ibn al-Athîr, Ifrîqîya was suffering from a famine and large numbers of people had crossed to Sicily in search of food.[132] This famine is mentioned in the biographical collection of the Moroccan, al-Tâdilî, as well.[133] However, once the Normans conquered Tripoli and Mahdîya, they set about rebuilding them, and to relieving the famine by shipments of food. "Grain was used as a practical means to enforce African loyalty: those who acknowledged Roger as lord could expect to be fed." Governors from the local elites were appointed to manage religious and judicial affairs.[134] But, by 1154, the Norman kingdom in Africa began to crumble before the Muwahhid advance.

Al-Idrîsî's work must be understood in light of its purpose: to gather information for Roger; his debt to al-Bakrî is considerable, but he provides new data as well. Interestingly, he starts by discussing the western Maghrib, rather than the path from Egypt which had been the usual course for earlier descriptions. However, for the purposes of this discussion, we will join him in Bijaya, which he described as the center of the central Maghrib and the most important city under the Banû Ḥammâd. It was a center for commerce, with ships and caravans arriving from all directions, enriching the inhabitants, whether merchants or craftsmen. Around the city were

fields of wheat and barley, and fruits in abundance. They also had a place where they constructed boats from the wood of trees in the mountains. Obviously the forests were still producing enough wood to build ships in the twelfth century. An excellent tar (pitch), an important item of trade, was acquired from this region; and it was an important mining center for iron.[135] One of the routes from Bujaya went to Tobna in the Zâb where cotton, wheat and barley were grown.[136] Tozeur was described as having good dates and bad water.[137] Gafsa was a flourishing market center, and it produced good dates, henna, cotton and cumin.[138] Gabes produced silk, and clothing of beautiful silk fabrics; however, the principle industry was the production of leather.[139] From al-Idrîsî's description it is evident that the center of commerce had moved from Sfax, Mahdîya, and Qayrawân, now in ruins except for a few people, to Tunis which had become a flourishing trading center.[140] Sûs also had become an important center for the export of fabrics and special turbans named after town.[141] However, Mahdîya was still inhabited in the early twelfth century according to accounts of Ibn Tûmart's life. He passed by the town in 500/1106-7 and met the famous jurist al-Mâzarî (d.536/1141-42) and studied with him.[142]

It is upon the basis of al-Idrîsî's text that many scholars have traced the devastation wrought by the Hilali

invasion. But his description is contradictory. On one hand, he stated that the region was devastated, and on the other, he specifically added that people were still growing crops and irrigating fields. Either his account is incorrect; or he has mixed old accounts with the new; or the devastation was not so complete, rapid or long-lasting as has been assumed by most scholars. What is surprising as well is that his description of Tripoli, which was attacked by the Normans in 1143, and then retaken in 1146, is brief and of little importance, except that he blames the "Arabs" for the destruction of the countryside and mentions that King Roger had reduced the inhabitants to slavery.[143] However, the account of al-Tijânî in his Riḥla, and the interpretation of M. Brett shows a city state ruled by a local elite, under the control of outsiders or independent, for this period.[144]

Al-Idrîsî's description of the region around Barqa is also confusing. He claims it was devastated by the Arabs, and its few remaining inhabitants were living in a miserable state. Barqa itself had only a few inhabitants and its markets were used only a little. The town was surrounded by Arabs. And yet, Barqa was still the first major stop for the caravans and ships coming from Egypt. The region still produced a cotton of superior quality named after the town, and had tanneries where the leather of cattle and leopard skins (nimr) were prepared. He also

mentioned the same exports as al-Bakrî, and stated that they were still exported to Egypt by boat.[145]. From Barqa to Awjîla was 10 stages by caravan and to Ajdâbiya it was six. All that was left of Ajdâbiya were two qsûr and no vegetation. However, the population was composed of Jewish and Muslim merchants. The region around it had many Arabs and Berbers; the fields were irrigated by mawâjil and sawânî, but they produced only a little wheat - the principle produce was barley and legumes.[146] From here to Awjîla was five stages. Awjîla was still a major stop on the caravan route to Kawâr, where slaves were acquired. From Awjîla the journey continued to Zâla, and then to Zawîla or Waddân. Zâla was inhabited by Berbers who were traders. Waddân had dates and cultivated fields. Another region five days march south of Surt was also termed Waddân by our author, probably in reference to a locale near Ghirza. In it were qsûr and many wells. They grew millet, and nearby were trees of mulberry, and figs, and dates. Numerous villages in this region are cited, all under the control of the Arabs, but inhabited by Berbers.[147] In many respects, the work of al-Idrîsî should be seen as a patchwork of old sources, new politics, and contradictory descriptions.

The anonymous Kitâb al-Istibṣâr, completed in 587/1191, provides a carefully updated account of the consequences of the Hilali invasions. But, it does not

detail the events following the Norman invasion; nor does it discuss the struggle between the Muwahhids and Banû Ghâniya which was underway at the time. The author also repeats much of al-Bakrî, such as the story of the "price fixers" in Surt.[148] In this account as well as the previous one, Barqa was still a prosperous region of good soil, pastures, and fertile mountain villages with fruit and streams only six miles away. Sheep raised here were traded in Cairo and Alexandria. So, most likely the inhabitants nearby were pastoralists. Ajdâbiya had gardens, some dates, a spring, baths,and funduqs and markets which were frequented by traders. The inhabitants were Copts and Luwata Berbers. Berbers and Arabs inhabited the territory which stretched to the Jabal Nafûsa. The Jabal is described as populated by Jews and Khawârij. From the Jabal the road split, in one direction to Ghadames and the other to Zawîla. Zawîla was still a slave entrepot where caravans gathered from all over Ifrîqîya to buy slaves; and it produced quantities of dates as well.[149] Between here and Egypt was the land called Balâd al-Wâḥât, the oases, the route to which had already been discontinued before his time. The text also mentions Maṭmâṭa,[150] a walled town south of Gafsa which today is still inhabited by pastoralists.

This text gives excellent details on the types of irrigation techniques used in Ifrîqîya. Gafsa is said to

have had water wheels (arḥâ') on the river to irrigate the fields.[151] The rest of the orchards were watered from springs outside the town where Arab nomads also brought their camels to drink at the wells. This is one of the first references to the use of the many cisterns studied by Solignac for the watering of animals. The author calls the irrigation at Gafsa a great feat of engineering (handasa) which required great precision. Also, the author states that "if you hear people debating in loud voices and words, you know it is about water." In fact, chiseled above one of the gates to the town was that "this is a land of precision and finesse."[152] The water which ran from the town to the gardens was called al-ma' al-dâkhil; and the water which was from outside is called al-ma' al-khârij. Irrigation was measured by the hour, and the workers in charge of the gardens and fields always knew the time of day exactly by looking at their shadows, even down to the minute. Water was expensive and often the cause of quarrels and disagreements.[153] Gafsa was surrounded by gardens and orchards which circled it for ten miles. These, and the eighteen suburbs, were enclosed by a wall with gates and towers. The orchards produced olives, dates, apples, pistachios, jasmin, narcisus, violets, lilies, and roses. And, in Gafsa they made special turbans and shawls of fine wool, pottery vases called rîhîya to contain water, and a glass of good

quality for glazed and gilded vases. In one of the suburbs nearby, the caravans passed, camping and tying their camels and mounts to prevent them from eating the leaves of the trees in the orchards. But, this beautiful scene was now in ruins according to the text since the Arabs had entered Ifrîqîya, and ravaged Qayrawân and other places in Ifrîqîya. Another interesting piece of information on agricultural products is in connection with Tozeur, where the inhabitants would sell the products of their latrines to be used to fertilize gardens. In fact, they even had latrines established in the gardens and along frequented paths for the use of people passing by so the remains could more easily be put on the gardens.[154] A fatwâ from the eleventh century jurist, al-Lakhmî of Qayrawân, refers to this practice when he states that a qâʿa mirḥâḍ to collect human excrement could not be used as ḥabûs for the upkeep of a mosque![155]

This account is one of the few to describe in detail some of the dangers a traveller might face who chose not to take the coastal route, but instead to follow an interior route across the saline (from which salt was gathered), and the marshes which stretched from Qastîliya to Nefzâwa. The journey across the marshes was by way of a path marked by poles planted in a humid, marshy ground which bubbled. And, if one made a mistake, it was likely that the person would fall in and perish. No one knew how

far the marshes went, except that eventually they stopped at the Sahara. The marshes could serve as a refuge for bandits or those running from the authorities. The land after this was dead, no animals or agriculture, only sand dunes in which the unwary could get lost, as well as the scholar![156]

Diffusion

These geographers and travellers accounts clearly show the impact of the Islamic conquest on Ifrîqîya. The region was once again part of a larger economic system, only instead of one monolithic empire, it included the Islamic world, the Byzantine Empire, and later, southern Europe. Muslims inherited not only the territory, but also the peoples of the Roman Empire. The expansion of the Islamic system facilitated a process of diffusion of institutions and technologies throughout the Maghrib, al-Andalus, and the Mediterranean basin. New crops, irrigation techniques, government and legal institutions, and business practices spread across the Maghrib, along with the language, religion and culture of the Arabs. Land and maritime transport systems provided the infrastructure to link this Islamic world.

In the Maghrib, there was already a complex network of roads which had been constructed under the Romans. Some

of these roads undoubtedly had fallen into disuse by the time of the Arab conquest, whereas others had continued to be used to carry goods from the interior to the coast for sale in the markets of urban centers like Tripoli, Barqa, and Carthage. Bulliet has offered evidence that wheeled carts were used during the reign of the Aghlabids, which may suggest that transport still continued along the Roman road system during the Islamic period. But there are few references to the construction or use of such carts in the medieval sources. It is more likely that most travel went by camel, and donkey, horse, or foot in the Maghrib. Throughout the medieval period, travel was characterized by its slowness, and travellers measured the distance from one place to another by the number of stages or days that a journey would normally take. In al-Idrîsî's day, it took ten days from Barqa to Awjîla, from Awjîla to Zâla was ten days, and from Zâla to Zawîla was ten days. So a traveller who wanted to go from Barqa to the Sudan by this route would spend at least a month to get only half-way to the major trading center of Khâwâr. But, at least this travel was possible. The use of camel caravans to cross the desert and carry goods changed the nature of regional trade from one of short to long distance trade. Travel, however, was not always safe. Sand storms, robbers, or disease could attack the traveller at any turn in the road. People often drew up their wills or disposed of

their belongings before going on hajj or across the Sahara. Given these difficulties it is amazing that people moved around at all. But, the Maghrib actually was traversed quite often, especially by pilgrims with the annual or semi-annual caravan to Mecca which started in the far west, usually in the Spring, and followed a path along the coast for two or more months before reaching Egypt. Caravans were also important in the winter when most travel by sea halted. And, by the tenth century, caravans were travelling regularly across the Sahara on journeys that might take a year or more before the traders would return home.

Land travel was conjoined with sea travel for both traders and pilgrims. Most centers along the coast in Ifrîqîya were ports for ships hopping from one safe haven to the next as they hugged the coast to avoid dangerous winds, currents, and pirates. A ship from Alexandria would usually stop at Barqa, Tripoli, Gabes, or Jerba, Mahdîya, Sfax, Sûs, Tunis, and Bijâya. Ships usually sailed in convoys of three or more, sailing east in the spring and west in the fall, to take advantage of the prevailing winds. Most merchants preferred sea travel since it was faster and, in general, less risky. The Geniza documents have numerous references to sea travel from Ifrîqîya to Sicily, Spain, and Egypt. The constant movement of people, goods, and ideas across the Mediterranean world encouraged

the diffusion of Islamic culture, the Arabic language, and technology.

Settlement and agriculture

When the Arabs first entered Ifrîqîya, they found an already well developed system of agriculture, which centered on the raising of wheat, barley, legumes, grapes, figs, grasses, and olives. These crops were grown either in areas irrigated by indigenous water control systems, or those built by the Romans; or they were dry farmed. They were raised either by share-cropping, slave labor, tenant farmers, or free owners. Under the Romans, this system had been developed to produce a large surplus of certain crops like wheat or olives. The indigenous inhabitants also raised flocks of sheep, goats, and pigs. However, much of the Roman cropping system had probably changed somewhat in the years between the Vandal invasions and the Arab conquest.

The Arabs first settled along the edge of the Sahil in Ifrîqîya, establishing urban centers away from Byzantine held regions. But once the conquest was completed, Arabs settled along the coast and in the rich land of the north near Carthage. Many of the best lands were awarded to those who participated in the conquest in the form of qaṭîʿa. In Ifrîqîya these locations can still

be determined by the use of the word manzil attached to towns and villages. Mohamed Talbi has given a good description of these landholdings in his work on law and economy in Ifrîqîya. He cites the case of ʿAlî b. Aslam who "was master of a large fortune, it is said, and of numerous hamlets (manâzil)- such as Jabanyâna and others as well..."[157] Other landholdings were not as large, some ranging from 120 to 170 hectares, and others barely large enough to support their owners.[158] The larger estates, in the first several centuries of Islamic rule, were often worked by slave labor. But others would take advantage of the migration of pastoralists during harvest or planting season to employ them in the fields. These workers would be paid a proportion of the crop for their labor.

Under the Arabs, agricultural production was maintained at a level sufficient to produce surpluses, at least until the eleventh century. The Aghlabids, Fatimids, and Zirids, built water supply systems, provided stability and safety on the trade routes, and fostered the economy. Many of the crops which had been the mainstay of the Romans did not change. Wheat, barley, and olives were still important in the Sahil, and plains of Ifrîqîya. Barley was often the food of the poor and the pious. Numerous accounts of the lives of sufis related that they ate barley. A variety of crops were also introduced or diversified under Arab rule. Al-Yaʿqûbî mentioned the

numerous variety of dates produced in the southern regions of Ifrîqîya such as Tozeur where the dates were as large as eggs. Ibn Ḥawqal in the tenth century stated that near Carthage safflowers, grain, olives, hemp, caraway, and cotton were grown. The tenth century Risâla of Ibn Abî Zayd al-Qayrawânî (310/922/3 - @ 380/992) on Mâlikî law provides important information in the sections relating to zakât and al-buyû'[159] The products upon which zakât was due were typical of Ifrîqîya: grains, dates, wheat, barley, rice, millet, sorghum, olives, olive oil, sesame oil,[160] camels, cattle, sheep,[161] and raisins. Al-Muqaddasî also added pistachios, saffran, and almonds as grown in the region around Barqa. By the time of al-Bakrî in the eleventh century, the list included nuts, oranges, indigo, sugar cane, and mulberry trees. Al-Idrîsî included henna, cotton, and cumin from Gafsa. Apples, jasmin, narcissus, violets, lilies, and roses were mentioned as plants grown near there in the twelfth century. Many of these plants were introduced by the Arabs who also carried them to al-Andalus.[162] These crops often required intensive irrigation, and management to grow in the semi-arid climate of Ifrîqîya. Rice and sugar cane were especially sensitive to drought, and required frequent watering.

The taxation on agricultural production was complex. Al-Qayrawânî's Risâla, stated that there was no point in

taxing quantities below six qafîz of grain or dates. For olives, the zakât was due when the amount reached five qafîz of olives or oil. For camels, only more than five animals would be taxed, for cattle it was more than thirty, and for goats it was more than forty. Thus, en effort was made by the legal scholars to encourage the protection of the poor and to levy the taxes on the rich. In practice, it did not always work out this way because the animals would be taxed at the time they were to be brought to market or sold. And, often the government collected illegal taxes. By the ninth century, taxes on production (zakât), and taxes on land (kharâj), were often paid in gold instead of in kind. [163]

However, by the eleventh century, a series of disasters took their toll on the agricultural system. In 1004-5, a famine, followed by epidemic disease struck, leaving many people dead. A similar scenario was repeated in the seventy-five years which followed. Sporadic outbreaks in the Jarîd, diversion of Saharan trade from Qayrawân with the rise of the Murâbiṭûn and their control of Sijilmâsa, and the movement of pastoral peoples west contibuted to an instability in agricultural production which resulted in the need to import wheat and and change the ways in which the land was worked and organized.

Irrigation

The variety of crops and their productivity was fostered by various administrations in Ifrîqîya, such as the Aghlabids and Zirids. They had numerous cisterns, canals, and wells dug and maintained throughout the countryside. Al-Muqqadasî described the use of mawâjin, ṣahârîj, and a qanât built during the reign of al-Mu'izz in 948. Qanâts were a technique used both by the Romans and Persians. However, most of the qanât systems in Ifrîqîya seem to date from the Islamic period. The noria, and a water clock device called a qadas, were also used to raise and allocate water supplies. Basically the systems either operated on the principle of gravity flow from a river stream, or mountain rains; or water was raised by the use of animal-driven wheels, or buckets pulled up from wells.

Access to water for farming, household use and public buildings was of major concern in Ifrîqîya, as it was in much of the Mediterranean. The allocation of water was carefully controlled by municipal officials, however it often led to numerous disputes. In Wansharîsî's Mi'yâr, there are several cases dealing with disputes involving irrigation which date from eleventh century Qayrawân. They indicate traditional practices in the region. One such case was that brought before Ibn al-Muḥris (d. 450/1058)

regarding payment to men who were cultivating another's field which was irrigated by water canals. They were paid 1/10 of the produce.[164] Here the existence of paid labor, as opposed to slaves is evident. The majority of cases involving water or labor disputes concerned free workers. Ibn Muḥriz also considered the case of many gardens irrigated by a sâniya (noria), worked by laborers to whom the owner paid 1/5 of the harvest.[165] In both cases, the payment was not considered proper and the proprietor was ordered to pay the zakât. Another case put before Al-Lakhmî (d.478/1085) involved the use of river water by Jews from a source of water for the ablutions and clothes washing of Muslims. In this case, the answer was that this was permissible.[166] Ibn al-Ṣâ'igh (d.486/1093) was involved in several cases; one of these considered those who were partners (sharîk) and wanted to divide the water from a single well. In this case an animal was used to pull the noria, which was on common property.[167] The proprieter of another property irrigated his field by means of a dalw made of leather.[168] And, in a third case involving the same legal scholar, a qanṭara mâ' or aqueduct was used to irrigate gardens.[169] A fatwâ of Ibn al-Ṣâ'igh (d. 486/1093) concerned an irrigation ditch which was the property of two or more associates who wanted to divide it. There was only one well. The system consisted of the well, cistern, and the area where the

animal turned the noria. Each irrigated on the days which had been allotted to him.[170] One final case of interest is that mentioned by al-Qâbisî (d. 403/1012) in the Mi'yâr where a land growing alfalfa is habûs land and there is a question of whether the irrigation water was part of the habûs settlement.[171] Many other properties and crops were habûs for the upkeep of various mosques, ribâṭs, cisterns, houses for the sick (such as lepers[172]) or other foundations for the public welfare.[173] One inhabitant even dedicated a horse as habûs for jihâd.[174]

As can been seen from these cases, there were a variety of water control and supply systems in use near Qayrawân. These systems of lifting and moving water were employed throughout the Sahil region. Further south, in Tozeur, water was also carried through canals. The supply of water was determined through the use of a water clock, and each farmer paid in advance for his allocation of water. This system was managed by the municipal authorities. By the fifteenth century, these timing mechanisms were also common in measuring the allocation of water to urban dwellings.

Urban Centers

Under the Romans, Ifrîqîya had hundreds of towns and villages. Whether the same number remained during the

early Islamic period still awaits the shovel of an archaeologist. But there was a process of building new towns as administrative centers, such as Qayrawân and Mahdîya, or maintaining old ones which had served as commercial centers, such as Barqa, Tripoli, and Gabes. These towns developed specific characteristics: walls with many gates, markets specialized in specific crafts or products, mosques and sacred places, plentiful water fountains for washing and drinking, quarters for different ethnic or religious groups, and a type of distinction between public, private and semi-private space. This public/private dichotomy meant that structures were built with walls opening into courtyards before the family rooms could be entered. Windows were veiled with lattice-work and grills. Above all, streets often ended in cul-de-sacs where a group of related families might have their dwellings. The use of animals for transport of goods and people led to streets that were winding and narrow.

A good description of the structure of a town in Ifrîqîya is that given in Abû Bakr ʿAbd Allâh al-Mâlikî's Riyâḍ al-Nufûs fî ṭabaqât ʿulamâ' al-Qayrawân, compiled in about 453\1061 and only partially edited.[175] This text was cited extensively by Idris in his work on the Zirids, and it was also summarized by him in Revue des études islamiques.[176] The text consists of biographies of jurists and pious men of Qayrawân and Ifrîqîya, and

includes a detailed description of the city of Qayrawân, its markets and crafts. It seems that each section of the city had different quarters which specialized in the production or sale of specific items. The names of the streets or sûqs, as well as the information in the text, throw some light on the function of each. There was the suq for the sale of spices (al-abzâriyyîn) on one of the main streets, al-Ṣimâṭ al-Aʿẓam.[177] Sûq al-Yahûd (the Jewish market) was on another main street, Darb al-Farsâs, not far from the main mosque. They also had their own quarter, ḥâra, and cemetery.[178] There was a suq for the sale of vegetables, grains, oil, and meat called Sûq Ibn Hishâm.[179] Sûq al-Aḥad, or the first day of the week market, one of the most important markets in the city contained the cloth and pottery merchants. The institution of the periodic market was indigenous to the region, existing even before the Romans; and each town or village had access to one of these periodic markets. Different markets for sheep (at Bâb al-Ghanam), camels (at Bâb al-Salam), slaves (Sûq al-Birka), chickens (Sûq al-Dajâj), dyers, fabrics, thread, silk, money changers, butchers, spices, grains, and a variety of other goods were marked by name and location in the text when they were near the house or workplace of one of the people mentioned in al-Mâlikî's collection.[180] There also was a quarter in Qayrawân, al-Baqrîya, where men could go to visit singers

or prostitutes.[181] The city was crossed with streets, each with its own particular economic activity. This kind of organization appeared in other cities in Ifrîqîya as well. However, some towns had gardens outside the city walls, and some included them in the interior.

Business Practices

The structure of the market is evident from the description of the city of Qayrawân, however, the mechanisms which allowed it to function are to be found primarily in legal texts. Al-Qayrawânî's Risâla lists many types of business practices, licit and illicit. The sale of fruits or grain before they have begun to ripen, or the sale of dogs were illicit.[182] It was also illicit to sell fresh fruit in exchange for dried, because items of the same species should not be exchanged one for the other. However, it was permissible to practice salam (sale with anticipation of payment at a later date) for land, slaves, animals, and spices as long as the term is fixed. Udovitch refers to this practice as common by the eleventh century.[183] This practice would allow traders to be paid a portion of their costs in advance of the departure of a caravan or ship. According to the Risâla, the price could be paid later in a different place; however, the goods could not be sold under or over their value. But, muqâssa,

or compensation, could be added to the final price. Also, a fee for services could be added to the price of goods. A cost for transport could also be assessed.[184] Merchandise could be also deposited with another for eventual sale. This often resulted in legal action over the conditions of such an agreement or the results.[185]

The tenth century jurist, Ibn Abî Zayd (d. 386/996) of Qayrawân, referred to business practices in many of his fatwâs.[186] The use of al-qirâḍ, or a commenda, was mentioned in a case concerned with the issue of profit or loss in connection with such a contract where he determined that the profits, if there were any, should be for the investor, and the losses born by the manager of the goods.[187] It is evident from these accounts that the use of something similar to a commenda was a business practice in the Maghrib. Udovitch has traced the issue of the qirâḍ in Islamic legal texts back to the Muwatta' of Mâlik ibn Anas where there is a detailed discussion of such arrangements.[188] The qirâḍ was also termed muḍâraba in the legal texts. "The term muḍâraba is derived from the expression 'making a journey' (al-ḍarb fîl-arḍ), and it is called this because the agent (al-muḍârib) is entitled to the profit by virtue of his effort and work. And he is the investor's partner in the profit and in the capital used on the journey and in its dispositions."[189] The Risâla also discussed qirâḍ, where it was permissable using money

but not land.

Partnerships or associations of artisans could also be formed as a sharika of two or more, as long as the profits and costs of each were stipulated.[190] A partnership to till, sow, and reap the land could be established.[191] The Risâla referred to the use of musâqât or partnership in trees, and vegetables. The parties to the agreement were to divide the work and the profits.[192] Many fatwâs in Wansharîsî's Mi'yâr relate to this problem of partnerships. One such instance is that referred to by al-Qâbisî in the late tenth century where two men shared ownership of an oil press (ma'ṣara).[193] Another case was that referred to by Ibn Abî Zayd (d. 386/996) of Qayrawân where two associates sold their merchandise together, but in the process became involved in a legal dispute over which one of them was liable for some lost property.[194] Thus, by the tenth century, or earlier, the legal and commercial mechanisms were in place to develop land and trade.

Many of the fatwâs in Wansharisi's Mi'yâr are from jurists residing in Qayrawân, Mahdîya or Tunis. They also give insight into trading activities. Regulation of the markets and transactions were of particular importance. Al-Lakhmî (d. 478/1085) referred to a case of a merchant selling bread under the "legal" weight. According to his fatwâ, the man could be expelled from the market for such

an offence.[195] Speculating in the market for commodities also occurred, despite the fact that Mâlikî jurists disapproved of the practice. Buying on credit was a common practice. Many merchants employed people to sell their wares in the street or to represent them in business deals, the payment of whom often became the object of disputes.[196] Along with the hawkers (munâdîn or al-ṭawwâfîn) who walked the streets trying to sell their wares, there was also the simsâr or broker/agent.

A treatise concerning the activities of the simsâr was written by the tenth century author, Abû al-ʿAbbâs ʿAbd Allah b. Aḥmad b. Ibrâhîm b. Isḥâq, known as al-Ibyânî (252/866 - 352/963).[197] Al-Ibyânî, who came from a small village southwest of Tunis, spent part of his life in Tunis, Mahdîya and Qayrawân. A portion of his work Kitâb masâ'il al-samâsira was retained in Wansharîsî's Miʿyâr (vol. IX, 120-22),; however, the rest of the work is still in manuscript form. His work is a collections of questions and answers concerning deals involving thiyâb or robes. The questions often conformed to the following format: A simsâr was given a robe to sell on the street at a prefixed price. The simsâr would leave the robe with another merchant who was interested in buying it. And, when he returned for either the merchandise or the payment, the garment had been lost. Who was liable for the cost of the lost item? Or, in another case, the simsâr was

given a defective garment, which he sold. Who was liable when the buyer discovered the fault? In other cases the simsâr sold the robe for the wrong price, the merchandise had been stolen, or the original merchant refused to pay him for his services.[198] Obviously the role of simsâr was not easy. However, it is a practice which still exists today in the sûqs of Tunis. Idris states that the simsârs probably constituted a corporate group, however he found no details on their organization for this time period.

Checks or letters of exchange were also common instruments in the market. The famous Mâlikî jurist, al-Mâzarî (d. 536/1141) of Mahdîya, gave his opinion in a case involving ḥawâla or letters of exchange (promissory notes) in which he related that it was the practice of shopkeepers to deposit their profits in dirhams in an account kept in dinars and sums were paid from the account by the use of checks or letters of exchange drawn up by the bankers or ṣayârifa.[199] This indicates that there were individuals whose profession was the changing of money or holding of deposits from which checks could be drawn. Another common form of deposit was to give money to a trusted individual to hold until a later date. In the eleventh century account of the Ibâḍî, Abû Zakarîya, he tells the story of an Ibâḍî shaykh who had a sum deposited with him by a man from Sfax. The deposit was in dinars. At first the shaykh refused, but upon the insistence of the

man, he accepted. When it came time to pay the zakât, the shaykh paid out of his own pocket the amount due on the sum deposited with him. Later, when the man did not return, the shaykh searched for him in Sfax; and finding him destitute, he bought him food and returned the sum which had been deposited with him.[200] Obviously the story was meant to illustrate the good qualities of the shaykh, but it also shows that depositing money with pious individuals was not an uncommon practice.

Insight into business practices in Qayrawân are evident in the lives of some of the illustrious men included by al-Mâlikî in his book. Many of these men engaged in trade, whether they were qâḍîs, ʿulama', or awliyâ. For example, ʿAsad b. al-Furât of Qayrawân, ninth century AD, paid for his travelling expenses through trade. On another occasion he engaged in the sale of some merchandise with the profit from which he bought parchment in order to copy some books.[201] Other sources mention the economic activities of saintly figures such as the tenth century walî, Mûlây Bû Silhâm, who, according to legend was at one time a water carrier and then a wood seller in Tunis.[202] One of the more interesting accounts is that of the use of children to sell merchandise. The mother of Abû Maysara Aḥmad b. Nizâr (d.337) placed him with a travelling merchant who used young boys to hawk merchandise. But Abû Maysara, on account of his honesty,

did not find the work suitable and left for al-Barka to study.[203] Many of the accounts refer to preparation to go on pilgrimage. In one account, the son of Muḥammad b. Masrûq, a wealthy and powerful man in the time of Mûsa b. Nuṣayr, upon the death of his father who owned several villages, set free all his slaves, sold all his goods, and left for Egypt. Another pious man ordered his servant to buy rough wool clothes, sold all his property, distributed his fortune to the poor and left for Mecca.[204] Both of these men were probably wise to divest themselves of their belongings before such a long trip since many died before they got back. The case of a pilgrim from Qayrawân who owned property in Gafsa, and died on route, leaving his relatives to pay the taxes on it is mentioned in the Mi'yâr.[205]

Besides being a stop on the pilgrimage caravan, Qayrawân also was a starting point for the Sudan or points across the sea. The arrival of a caravan from Tripoli on its way to the Sudan is described as consisting of 100 camels loaded with merchandise.[206] Among the merchandise sent south were probably copper chains gilded with mâ' al-ḏahab. Ivory was brought back from the Sudan and made some merchants immensely wealthy. In one case, a religious man by the name of Abû al-Faḍl Aḥmad b. 'Alî refused the 1000 dinars inherited from his father which had been made from trade in ivory. Ships with wheat from the Sahil left for

Alexandria. Slaves were sold as well. There is a story of a trader who was moved by the tears of slaves he was sending East, and so he freed seventy of them.[207] Other stories point to the wealth that could be accrued through commerce. In one, a young man found a note written by his father in which he summarized both his philosophy and experience in business: "I have given all that I possess, more than one thousand dinars, there was left for me no more than five. I put that sum in commerce, and they returned to me a thousand more. I gave them to the poor, and I put the last five dinars to work and they produced a thousand more which I distributed again. I did this four times, and I saw that God would help me and I continued."[208]

Trade: Sea and Sand

The flow of trade through Ifrîqîya varied with the vagaries of politics. The caravans which carried slaves, gold, ivory and other items up from the Sudan relied on safe passage through dozens of oases and trails through the desert, plains, and coastal regions of the Maghrib. Trade by sea revolved around the weather, pirates, and safe ports. Until the eleventh century the Aghlabids, Fatimids, and Zirids were able to provide the political stability needed to foster commerce. At that point, as a

result of the rise of the Murâbiṭûn in the western Maghrib, and the continuing efforts of the Fatimids in Egypt to divert caravan routes, the Sudan trade was shifted away from Qayrawân. An attempt was made to revive Mediterranean trade through Ifrîqîya, ultimately with little success as Ifrîqîya broke into a series of small spheres of influence by the twelfth century.

Sea

The most detailed account of the activities of the Ifrîqîyan trade in the Mediterranean is to be found in the Geniza documents, made available through the work of Goitein. They offer information on the functioning of the commercial markets of the Mediterranean during the tenth and eleventh century. Many of the Jewish Cairene traders who deposited their writings in the Geniza were originally from Ifrîqîya or had business partners there. Many of them lived, or had business partners in Qayrawân, Mahdîya, Gabes, Sfax, Sousse, or Tripoli. The letters are primarily useful for describing the trade and activities in which Jews were involved. There is, for example, little mention of items controlled by governments for strategic reasons such as weapons, iron, wood or wheat. Also, highly lucrative items such as slaves, and raw gold (tibr), or food items like camels, cattle, sheep, or grain are almost

entirely missing. Since this trade is mentioned in other sources, it is most likely that Muslim traders were involved in these activities. According to Goitein, "the international commerce of Jews was closely intertwined with local Jewish industries and retail businesses."[209] Therefore, fabrics, clothing, dyes, thread, perfumes, spices, jewelry materials, oil, soaps, wax, and paper were more common items for Jewish traders to buy and sell. There are, as well, some curious omissions from the Geniza correspondence. One of these is the lack of letters from the Sudan, an indication that Jews may have played a limited role in Saharan trade at this time except as traders in places along the northern edge of the Sahara like Sijilmâsa.[210] However, the Ibâḏî sources mention Jews residing in oasis towns like Zawîla.

The letters mentioned mostly luxury goods purchased in Ifrîqîya, primarily Qayrawân, Mahdîya, or Sfax, for sale in other locations. One example from around 1000 A.D. was a letter sent from Qayrawân to Fustat which mentioned silk sold in Qayrawân (one pound for 1 1/2 dinars qayrawânî); and the purchase of brazilwood there for 265 dirhams which was later sold in Spain at high profit for 125 dinars.[211] This letter is only one of many that shows the international nature of Mediterranean trade, where items would be bought and sold at various stops. A lively trade was carried on among Spain, Sicily, Ifrîqîya, and

Egypt during this time. In the eleventh century, a letter was written from a trader in Amalfi, Italy to al-Mahdîya, to a merchant from Alexandria who had purchased pepper to sell later. The letter described his ship being pursued by pirates. He told his friend to sell 1 bale of indigo, 2 of flax and other items in al-Mahdîya, and from the profits the friend could take 280 dinars as a loan until his return. [212] In 1050, a Tunisian merchant wrote to someone in Egypt; and, among the items mentioned in the letter were cotton and figs from Tripoli, wheat, red earth, and raisins,[213] An unusual account is that of a Fasi merchant who sent a bar of gold with the writer of the letter to sell in Spain in order to buy silk.[214] In 1010, a letter from the Tâhertî brothers in Qayrawân to the Tustarî family in Cairo listed mostly high priced textiles as items of trade.[215] In 1020, a letter from Qayrawân was written by a leading Jewish merchant, Abû Zikrî Judah, who had connections with the Sultan, Mu'izz b. Bâdis (1016-62). He alone of all the Jewish merchants was allowed to send his goods on the sultan's ship. The reference to the sultan's ship is important because it indicates that goods other than those traded by the Jews were carried on ships controlled by the government. This trader was also associated with the sultan's aunt who ruled in the early years of his reign (Umm Mallâl).[216] In 1020, a former slave of the Tahertî brothers who became a merchant wrote

of the impact of the pilgimage to Mecca on commerce. He stated that it was possible to obtain fine pearls cheap prior to the departure of the caravan since the pilgrims needed money and would sell them. And, pearls were again abundant when the caravan returned because they would bring them from the Arabian sea.[217] In 1020, a letter to Ibn ʿAwkal mentions copper fragments and kohl. He had also shipped goods as a partner with others: tin (a shipload in a partnership with trader from al-Mahdîya), soap (jugs), and hammered copper. Finally he mentioned the fact that bribery was necessary to ensure that his goods would be unloaded in Egypt.[218]

In the years 1062-73, anarchy followed the breakdown of the state in Ifrîqîya which led to the development of several small independent city states. Many of the Geniza letters referred to these events. A letter from Sicily to Sfax dealing with these matters stated that the writer faced execution five times in Mahdîya and ultimately decided to move to Sicily. The only merchants left in Mahdîya were Muslims. The writer sent money to Mahdîya, and oil, and soap, with a Muslim merchant from Sfax.[219] The difficulties faced by merchants in the aftermath of the mid-eleventh century upheavals is evident in other letters as well. The letters of Nahray, a Jewish merchant from Qayrawân referred to the purchase of flax from Sûs, also indigo, lac, and lapis lazuli, as well as the

plundering of the funduq in Sus[220] A letter of 1061 from Mahdîya to Fustat by the Jewish chief judge at Mahdîya mentioned the Norman Conquest of Sicily in 1061 and that because of it prices had gone up since the city had relied on Sicily for grain after the Hilali invasion.[221]

The meticulous research of Goitein on these documents demonstrates that sea-born trade was a lucrative business carried on by Jews and Muslims. The use of partnerships, letters of credit, loans, and other banking and business institutions developed as this trade grew more profitable and more complex. What is surprising, however, is that the Jews became wealthy off a trade that was not dependent on the Sudan trade. The shipping of slaves and gold as tribute, taxes, or business ventures was in the hands of governments and Muslims in Ifrîqîya.

Sand

There has been much debate over the nature of the Saharan trade in the Maghrib. The number of articles on this subject could probably fill several camel loads. Michael Brett has published two excellent articles on the Saharan trade: "Ifriqiya as a Market for Saharan Trade from the Tenth to the Twelfth Century," and "Islam and Trade in the Bilâd al-Sûdân, Tenth-Eleventh Century." Mark Dyer has treated this subject during the seventh through

ninth centuries. J. Devisse has a detailed article on trade in West Africa in the UNESCO series on Africa; and all the important Arabic references have been collated and translated into English by Levitzon and Hopkins.[222]

The impression formed by the copious references in the documents, and the research is that of a developing system of trade networks which passed through the new cities of Qayrawân, Mahdîya, Tunis, Tlemcen, Sijilmâsa, and Fez constructed under the Muslim rulers of the Maghrib. This trade was first managed by Berbers, later Ibâḍîs, who established a presence in oasis towns such as Zawîla, Waddân, Khâwâr, Awghadust, and Timbuktu; and pre-Saharan regions such as the Jabal Nafûsa, Sijilmâsa, the Jarîd, the Zâb, and other areas that stretched across the limits of inhabitable land.

The original impetus for this trade was the acquisition of slaves to ship east or to work the estates of Ifrîqîya. The need for black slaves increased as the Berbers assimilated into the umma as Muslims. The other driving force in the trade with the Sudan was gold. As can be seen from the chronicles discussed previously, the trade commenced before the Arab conquests. But it may have been the camel caravans of the ninth century which supplied the Aghlabids with a gold coinage of almost 100 percent purity between the years of 841 and 863.[223] These slaves and gold were purchased with cloth, salt, horses,

and copper. Food items, such as grains, dates, and dried fruits were also brought south where, in many regions, wheat and fruits could not be grown.

The importance of this trade, and the quantities of gold carried over these routes is still debated by scholars. Its resolution perhaps awaits the final results of archeological excavations which are now underway at the sites of Sijilmâsa, Awdaghust, Jenin, and other sites along the trade routes described by al-Bakrî and later authors. However, the disruption of these routes by the twelfth century can perhaps explain the problem the Hafsids had in keeping the gold content of their coinage.

Conclusion

In general, the documents show that the economy of Ifrîqîya was based on agriculture, pastoralism and trade. Commerce and industry were very important to the economy, so much so that taxes were sometimes assessed on profits not assets.[224] In fact, sophisticated mechanisms to control the market, facilitate business (such as checks and letters of credit), deal with water and property rights, partnerships and corporations, loans and debts, taxes on profits, assets, commerce and production had all been refined and put into use by the tenth century in Ifrîqîya. Irrigation techniques employed canals (sâqiya)

to direct water from a source, cisterns (ma'jil), norias (sâniya) operated by animal power, leather pails (dalw) pulled by ropes passed through pulleys, and aqueducts (qanṭara mâ'). And farmers had even developed a method of collecting fertilizer to deposit on their fields.

The institutions and mechanisms to produce crops and crafts, manipulate markets, and record profits and taxes were well in place by the twelfth century. Ultimately these tell us more about how people worked, spent money, and negotiated with each other than the numbers. It is also possible to see a slow diffusion or development of agricultural products and industrial techniques. Between the eighth and eleventh century products like cotton, rice, sugar cane, and silk became important items in an economy which had centered on grain and olives. New techniques in irrigation such as lifting devices and qanâts to carry irrigation water long distances become intrinsic to the functioning of village and urban centers. Glass, fine textiles, glazed pottery, and leatherwork are refined and become items of trade. And, urban centers became transformed from the grid pattern of Roman towns, to the serpentine pattern of private quarters in Islamic centers. However, all of this is overshadowed by the rush to control the market in slaves and later gold. The geographical accounts do not adequately discuss the growing imbalance between production and population in

Ifrîqîya and the shifting trade routes, as the most important trade in gold moved west. But, perhaps the most important aspect of the medieval economy in Ifrîqîya, is that it came to be interpreted according to Islamic law and values. And thus, Islam becomes a filter which imbues the transactions in the marketplace, exactions at the toll station, deposits with the shaykh, and bequests to children.

1.Al-Mutannabbî, as quoted by the twelfth century Qayrawânî, Ibn Mann Allâh Hawwârî. Translation from H. T, Norris, The Berbers in Arabic Literature, (London and New York: Librairie du Liban, 1982), 9.

2.Lacoste, op. cit., 16.

3.Ibid., 26.

4.Ibid., 27.

5.Ibid.

6.Ibid., 30-1.

7.Ibid., 32.

8.K. N. Chaudhuri, Asia Before Europe: Economy and Civilisation of the Indian Ocean from the Rise of Islam to 1750, (Cambridge: Cambridge U. Press, 1990), 251.

9.Mohamed Talbi, "Law and Economy in Ifrîqiya (Tunisia) in the Third Islamic Century: Agriculture and the Role of Slaves in the Country's Economy," in The Islamic Middle East, 700-1900: Studies in Economic and social History, edited by A.L. Udovitch, (Princeton: Darwin Press, Inc., 1981), 209-50.

10.Laroui, op. cit., 122.

11.Ibid., 124-5.

12.Talbi, 221.

13.Ibid., 126-7.

14.Abû al-Qâsim b. Ḥawqal al-Nuṣaybî, Kitâb ṣûrat al-arḍ, ed. J. H. Kramers, (Bibliotheca Geographorum Arabicorum II, 2nd edition) (Leiden, 1938-9), vol. 1, 99.

15.Hady Roger Idris, Zîrîdes, vol. 2, 608.

16.S.D.Goitein, A Mediterranean Society, (Berkeley, 1967), I, 217.

17.Miʿyâr, (1), VI, 25.

18.Ibid., (1), V, 93.

19.M. Talbi, "The Independence of the Maghrib," in General History of Africa, vol. III, edited M. Fasi, (UNESCO,1988), 266,7.

20.Al-Bakrî, op. cit., 26.

21.Idrîsî, op. cit., 129.

22.Al-Bakrî, op. cit., 26.

23.See Idris, Zîrîdes, II, 531-2.

24.Chalmeta, op. cit., 741-58.

25.Ibid., 742.

26.Corpus of Early Arabic Sources for West African History, translated by J.F.P. Hopkins and edited by N. Levtzion and J.F.P. Hopkins, (Cambridge: Cambridge U. Press, 1981), 11.

27.Talbi, op. cit., 209. He does not cite the passage in Saḥnûn's text.

28.Ibn ʿAbd al-Ḥakam, Futûh Ifrîqîya, 34-5. Garrard in "Myth and Metrology," p. 450, stated these were possible gold solidi.

29.Talbi, op. cit., 210, cites EI2, III, 271. However, the definitive victory was really that in 82/701 after the defeat of al-Kâhina.

30.Abû Bakr ʿAbd Allâh b. Abî ʿAbd Allâh al-Mâlikî, Riyâd al-nufûs fî tabaqât ʿulamâ' al-Qayrawân..., ed. H. Mones (Cairo, 1951), I., 126-27, 81. Also, this is cited by Talbi, 211. Al-Mâlikî gives the example of the father of Abû ʿAbd Allâh Muḥammad b. Masrûq (d. 9th cent.) who had an entire village on the road to Sousse.

31.Talbi, op. cit., 213.

32.Ibn ʿAbd al-Ḥakam, 46-48. There has been much debate over who these people were. J.F.P. Hopkins in Medieval Muslim Government in Barbary Until the Sixth Century of the Hijra, (London: Luzac & Co., 1958), 62-5; suggests that they may have been Christians descended from the Carthaginians, or Berbers with a Punicized language.

33.E. Lévi-Provencal, "Un nouveau récit de la Conquete de l'Afrique du Nord par les Arabes," Arabica, I (1954), 36-7.

34.Ibn ʿAbd al-Ḥakam, op. cit., 35.

35.Ibid., 60-67.

36.Ibn ʿAbd al-Ḥakam, Futûḥ Miṣr, ed. Charles Torrey, (New Haven, 1922), 217. Translated in Corpus, 13.

37.Garrard, "Myth and Metrology," 450.

38.Abû Isḥâq Ibrâhîm b. Muḥammad al-Fârisî al-Kharkhî al-Iṣṭakhrî, (d.340/951), Kitâb masâlik al-mamâlik, ed. M. J. de Goeje, (Leiden, 1870), 45. "From the Maghrib there come black slaves (khadam) from the land of the Sudan..."

39.Talbi, op. cit., 216-7.

40.Laroui, 86.

41.Ibid., 87.

42.Bulliet, op. cit., 202, citing Talbi L'émirat aghlabide, 287-8.

43.Ibid., 202.

44.E. Savage, "Berbers and Blacks: Ibâḍî Slave Traffic in Eighth Century North Africa," Journal of African History, 33 (1992), 364. "In the passage, Saḥnûn was writing in the ninth century, he cites a legal opinion of the famous eighth century jurist, Mâlik (d.795). Thus Saḥnûn repeats an eighth-century textual source that specifically links the Ibâdiyya with the Fazzân and the early slave trade with the Bilâd as-Sûdân." He terms them Abyssinians. Her scenario may be correct, but her use of Ṣahnûn's citing of Mâlik on the 'Abyssinians'as proof of a trade with the Fazzân may be incorrect. The term Habasha is used in the texts to refer to regions both east and west in the Sudan with no great accuracy.

45.Laroui, op. cit., 107.

46.Corpus, 19-20.

47.Aḥmad b. Abî Yaʿqûb b. Jaʿfar b. Wahb b. Wâḍiḥ (al-Yaʿqûbî), Kitâb al-buldân, ed. M. J. de Goeje, (Leiden, 1892), 346. An interesting article about the Ibadi influence in the Sudan is that of Marie Perinbam, "Were the Maghribi Ibâḍiyya Contributors to West African Food Production?: an Evaluation of the Evidence," The Maghreb Review, 12, 3-4, (1987), 66-77. Another by the same author concerns Ibadi trade: "Soninke-Ibâḍiyya Interactions in

the Western Sudan C. Ninth to C. Eleventh Century," The Maghreb Review, 14, 1-2 (1989), 70-90.

48.Abû al-Qâsim ʿUbayd Allâh b. ʿAbd Allâh Ibn Khurradâdhbih, Kitâb al-masâlik wa al-mamâlik, ed. M. J. de Goeje, (Leiden, 1889), 87-8. The Darʿa is in the western Maghrib. Habasha refers to all Blacks in the Sudan (which is all of sub-Saharan Africa).

49.Ibn Ṣaghîr, Chronique d'Ibn Ṣaghîr sur les imams rostemides de Tâhert, ed. A. de C. Motylinski, Actes du XIVe congrès international des orientalistes, (Alger, 1905), troisième partie, (Paris, 1908), 13. As translated in Corpus, 24.

50.al Yaʿqûbî, op. cit., 342-4. And, Berber women were highly valued as singers, housekeepers, sexual partners and childbearers. See E. Savage, 353-4.

51.Hudûd al-ʿAlam: The Regions of the World: A Persian Geography 372-982 A.D., trans. V. Minorsky, (Karachi: Indus Publications, 1980), 165

52.Al-Yaʿqûbî, op. cit., 344-5. See also, Aḥmad b. Saʿîd al-Shammakhî, al-Siyâr, (Qsuntina: no date), 103, 114.

53.Al-Shammâkhî, Siyar. As cited by T. Lewicki, "De quelques textes inédits en vieux Berbère provenant d'une chronique ibadite anonyme," Revue des etudes islamiques, VIII (1934), 275-96.

54.Ibid., 288-91.

55.Fatwâ of al-Mazarî. Miʿyâr, (1), III, 231. .

56.Al-Yaʿqûbî, op. cit., 346.

57.Al-Yaʿqûbî, op. cit., 347. See also Abuswa, op. cit., 237-41.

58.Abuswa, op. cit., 235.

59.Abuswa, op. cit., 235. See also al-Yaʿqûbî, op. cit., 348.

60.M. Solignac, "Recherches sur les installations hydrauliques de Kairouan et des steppes tunisiennes du VIIe au XIe siècle (J. -C.)," Annales de l'institut d'études orientales, X (1952), 7.

61.Ibid., XI (1953), 169.

62.Ya'qûbî, op. cit., 349.

63.Al-Ya'qûbî, Târîkh, ed. M. Th. Houtsma, (Leiden, 1883), 220.

64.Bernard Rosenberger, "Tamdult: cite miniere et caravaniere presaharienne IXe - XIVe s.," Hesperis-Tamuda, XI (1970), 110.

65.Al-Ya'qûbî, Buldan, 359. As translated in Corpus, 22.

66.al-Mas'ûdî, op. cit., vol. IV, 39.

67.Abû Bakr Aḥmad b. Muḥammad al-Hamadhânî (Ibn al-Faqîh), Mukhtaṣar Kitâb al-Buldân, ed. M.J. de Goeje, (Leiden, 1885), 87.

68.Abû Muhammad al-Ḥasan b. Aḥmad al-Hamdânî, Kitâb al-Jawharatayn al-'atîqatayn al-Mâ'i'atayn min alṣafrâ' wa-'l-bayḍâ', ed. C. Toll (Uppsala: 1968), 142. As translated in the Corpus, 29.

69.Al-Mas'ûdî, op. cit., IV, 92; as translated in Corpus, 32.

70.Shams al-Dîn Abû 'Abd Allâh Muḥammad b. Aḥmad al-Muqaddasî, Aḥsan al-taqâsîm fî ma'rifat al-aqâlîm, ed. M. J. de Goeje, (Leiden, 1906), 231.

71.Ibid., 241.

72.Abû al-Rayḥân Aḥmad al-Bîrûnî, Kitâb al-jamâhir fî ma'rifat al-jawâhir, ed. F. Krenkow, (Hyderabad, 1355/1936), 241.

73.Corpus, 43.

74.Ibn Ḥawqal, op. cit., 63-67.

75.Ibid., 68.

76.Ibid. 69.

77.See Menahem Ben-Sasson, "The Jewish Community of Gabes in the Eleventh Century: Economic and Residential Patterns," in Michel Abitol edited, Communautés juives des marges sahariennes du Maghrib, (Jerusalem: Institu Ben-Zvi), 265-284.

78.Ibid., 278-9.

79.Ibid., 279, citing the case of two brothers who inherited property. "The irrigation canal was sufficient for the inner portion but not for the brother who owned the outer portion. And he prevented it from flowing across to water the field... and the transfer of that water since it passed had been customary and he fell silent."

80.Ibn Ḥawqal, op. cit., 70.

81.Ibid.71-2.

82.See Talbi, "Law and Economy," where many of the landgrants that he refers to were prefaced with the word manzil or the texts mentioned that people had been given manâzil; for example: in the ninth century Masrûq had been given manâzil by Mûsâ ibn Nuṣayr (p.211); ʿAlî ibn Aslam was the master of numerous manâzil (p.211), as was Abû Muḥriz (d. 214/829), grand qâdî of Qayrawân (p.212). Talbi concludes that the term must have been used for landgrants. See note 16 in his text.

83.Ibn Ḥawqal, op. cit., 73.

84.Ibid., 74-5.

85.Ibid., 100.

86.Ibid., 102.

87.Ibid., 61, as translated in Corpus, 45.

88."La Chronique d'Abû Zakariyyâ' al-Wargalânî," trans. R. Le Tourneau, Revue africaine, CV, (1961), 138-9.

89.Ibn Ḥawqal, op. cit., 46.

90.Ibid.,49.

91.Ibid., 97.

92.Laroui, op. cit., 124.

93.See for equivalence, Idris., Zîrîdes, vol. 2, 424.

94.al-Muqqadasî, op. cit., 225-6.

95.Ibn Khallikân, op. cit., vol. III (1869), 377-9.

96.Al-Muqqadasî, op. cit., 239.

97.al-Bakrî, op. cit., 5.

98.Ibid., 6-7.

99.See Michael Brett, "The City-state in Mediaeval Ifriqiya: the Case of Tripoli," Les Cahiers de Tunisie, 34, no. 137-8, (1986), 80-1.

100.Michael Brett, "The Zughba at Tripoli (1037-8 A.D.)," Libyan Studies, 6, (1974-5), 41-2.

101.Ibid., 44.

102.al-Bakrî, op. cit., 8.

103.Ibid., 9.

104.Ibid., 10.

105.Ibid. 12-3.

106.Olwen Brogan and Smith, Ghirza, 274. See chapter 3 for references.

107.Al-Bakrî, op. cit., 156-59.

108.Ibid., 162.

109.Ibid., 171.

110.Ibid., 182.

111.Ibid., 183.

112.Ibid., 17.

113.Ibid., 19.

114.Ibid., 19-20.

115.Idris, Zîrîdes, II, 637. Under the Aghlabids, the artisans of the city also produced parchment. Paper was introduced to the region by the tenth century, but there are no reference to its production in the region.

116.Georges Marçais and Louis Poinssot, Objets Kairouanis IXe au XIIe siécle: reluires, verreriers, cuivres et bronzes, bijoux, vol. XI, fasc. 1 (Tunis, 1948), fasc. 2 (1952).

117.Fatwâ of al-Qâbisî, Miʿyâr, (1), IX, 434-35.

118.al-Bakrî, op. cit., 26.

119.Talbi, "Law and Economy," 221-2, citing Ibn Idharî, Bayân, I, 356.

120.Ibid., 223.

121.al-Bakrî, op. cit., 27.

122.Ibid., 32.

123.Ibid., 33.

124.Ibid., 36.

125.Garrard, op. cit., 457-8.

126.Ibid., 455.

127.Ibid., 40-5.

128.Ibid., 48.

129.Ibid., 48. The word qadas is probably a derivative of the word qâdûs, meaning a water-wheel with buckets. Pol Trousset discusses the development of this irrigation technique in "Les oasis présahariennes dans l'antiquité: partage de l'eau et divisions du temps," Antiquités africaines, 22 (1986) 163-93; and suggests that this technique was common among the Berber tribes in this region in Roman times. It was also used in Arabia.

130.Ibid., 49.

131.See Idris, Zîrîdes, vol. II, 604-5 for discussion. He refers to a fatwâ by al-Qâbisî (d.403/1012) in Mi'yâr, (1), VII, 22-3.

132.Ibn al-Athîr, Al-Bayan. as translated in Abulafia, "The Norman Kingdom of Africa and the Norman Expeditions to Mayorca and the Muslim Mediterranean," in Anglo-Norman Studies VII: Proceedings of the Battle Conference, 1984, (Woodbridge: Boydell and Brewer, 1985), 34. "...the king of Sicily understood that he would be missing a good chance to conquer the country, if he did not take advantage of the scourge that afflicted Africa, that is to say the famine that had not abated since A.H. 537 (1142-3)."

133.al-Tâdilî (627/1229-1230), al-Taṣawwuf ilâ rijâl al-tasawwuf, (Rabat: A. Faure, 1958), 162,293.

134.Ibid., 36-7.

135.Abû ʿAbd Allâh Muḥammad b. Muḥammad al-Sharîf al-Idrîsî, Nuzhat al-mushtâq fî ikhtirâq al-âfâq, partial edition and translation into French by R. Dozy and M. J. De Geoje: Description de l'Afrique et de l'Espagne par Edrîsî, (Leiden, 1866), 90-1 (ar)/ 104-5.

136.Ibid., 93.

137.Ibid., 104.

138.Ibid., 104.

139.Ibid., 106.

140.Ibid., 11-2.

141.Ibid., 125.

142.Ibn Idhârî, al-Bayân al-mughrib fî akhbar al Maghrib, ed. G.S. Colin and E. Lévi-Provençal, (Leyde: 1948-51), I, 303. Translation, Fagnan, (Alger: 1901-4), I, 452.

143.al-Idrîsî, op. cit., 121-22.

144.Brett, "The Case of Tripoli," 81-5.

145.Al-Idrîsî, op. cit., 131.

146.Ibid., 132.

147.Ibid., 133.

148.Kitâb al-Istibṣâr fî aʿjâ'ib al-amṣâr, ed. Saʿd Zaghlûl ʿAbd al-Ḥamîd, (Alexandria, 1958), 143.

149.Ibid., 143-6.

150.Ibid., 150.

151.See Thomas F. Glick, Islamic and Christian Spain in the Early Middle Ages, (Princeton: Princeton University Press, 1979), 232, for a discussion of terminology.

152.Ibid., 153.

153.Ibid., 153-4.

154.Ibid., 154-55.

155.Miʿyâr, (1), VI, 232.

156.Istibsâr, 156-9.

157.Talbi, "Law and Economy," 211.

158.Ibid., 214.

159.Ibn Abî Zayd Al-Qayrawânî, Risâla, edited and translated by Léon Bercher as La Risâla ou epître sur les éléments du dogme et de la loi de l'Islam selon le rite mâlikite, (Alger: Editions populaires de l'armee, 1968), 129-41, 201-221.

160.Ibid., 129.

161.Ibid., 137-9.

162.See the section in Glick on agriculture, 76-8.

163.See the discussion of this issue in Hopkins, Medieval Muslim Government in Barbary until the Sixth Century of the Hijra, (London, 1958), 44-5.

164.Fatwâ of Ibn al-Muhris, Mi'yâr, I, 365, or (1), I, 296.

165.Mi'yâr, I, 366.

166.Fatwâ of al-Lakhmî, Mi'yâr, (1), VIII, 271.

167.Fatwâ of Ibn Sâ'igh, Mi'yâr, (1), VIII, 258.

168.Mi'yâr, I, 369 or (1), I, 298.

169.Fatwâ of al-Ṣâ'igh, Mi'yâr, (1), V, 306.

170.Mi'yâr, VIII, 258.

171.Fatwâ of al-Qâbisî, (1), VII, 24-5.

172.Fatwâ of al-Qâbisî, Mi'yâr, (1), VII, 25.

173.See Idris, Zîrîdes, II, 606.

174.Fatwâ of al-Suyûrî, Mi'yâr, (1), VIII, 272.

175.Abî Bakr 'Abd Allâh b. Abî 'Abd Allâh al- Malikî, Riyâd al-Nufûs, Ed. by H. Munis (Cairo: 1951).

176.Idris, "Contribution a l'histoire de l'Ifrikiya: Tableau de la vie intellectuelle et administrative a Kairouan sous les Aghlabites et les Fatimites: d'après le

Riyâd en Nufûs d'Abû Bakr el Mâliki," Revue des études islamiques, (1934).

177.As cited in Idris, Zîrîdes, vol. 2, 418, note 66.

178..Ibid., 423, note 138.

179.Ibid., 419, notes 82, 90.

180.Ibid., 418-21.

181.Ibn Nâjî, Ma'âlim al-îmân fî ma'rifat ahl al-Qayrawân, (Tunis: 1320H), vol. 2, 118.

182.Risala, 209.

183.Abraham L. Udovitch, "Credit as a Means of Investment in Medieval Islamic Trade," Journal of the American Oriental Society, LXXXVII, 3 (1967), 2.

184.Risâla, 213-5.

185.Fatwâ of Ibn Shablûn (391/999) of Qayrawân, Mi'yâr, (Amar), vol. II, 164. This fatwâ relates to an individual putting a deposit in the keeping of two people. The question is - who should keep it? And the logical answer was the most honorable of the two. If neither one was honorable, then the qâḍî could put it in the hands of a third party.

186.See, Idris, Zîrîdes, II, 624.

187.Fatwâ of Ibn Abî Zayd, Mi'yâr, (Amar), vol.II, 270.,

188.Abraham L. Udovitch, "At the Origins of the Western Commenda: Islam, Israel, Byzantium," Speculum, XXXVII, 2 (1962), 1-11.

189.Abraham Udovitch, Partnership in Medieval Islam, (Princeton: Princeton U. Press, 1970), 174-5. This is a translation of Sarakhsî's Mabsût, 22:18.

190.Risâla, 217-8.

191.Ibid., 218-9.

192.Ibid., 217.

193.Fatwâ of al-Qabîsî, Mi'yâr, (1), IX, 77.

194.Fatwâ of Ibn Abî Zayd, Mi'yâr, (Amar), vol.II, 96.

195.Fatwâ of al-Lakhmî, Miyar (1), VI, 347-8; (Amar), I, 493-4.

196.See discussion in Idris, Zîrîdes, II, 652; and Mi'yâr, (1), V, 176-77, VIII, 198-99; (Amar), II, 78-79.

197.See the article by Idris, "Les courtiers en vetements en Ifrîyiya au IXe - Xe siécle d'apres les Masâ'il al-samâsira d'al-Ibyânî," in the collection of his articles Etudes d'historie Ifriqiyenne et de la civilisation musulmane médiévale, (Tunis: Publications de l'universite de Tunis: 1982), 231-262.

198.Ibid. trans. by Idris, 236-49.

199.See comments of Mohamed Talbi on this fatwâ of al-Mâzarî (Mi'yâr, VI, 212, 219.) in "Operations bancaires en Ifrîqiya a l'époque d'al-Mâzarî (453-536/1061-1141)," in Etudes, 420-35.

200."La chronique d'Abû Zakariyyâ' al-Wargalânî," as translated by R. Le Tourneau, Revue africaine, CV, (1961), 147-8

201.al-Mâlikî, Riyâd, 172, 176-77; and in Idris, "le Riyad," 305.

202.See Georges Salmon, "Quelques légends relatives à Moulay Bou Selham," Archives marocaines, IV, (2-3), (Paris: Ernest Leroux, 1905), 412-7; and Vincent Cornell, Mirrors of Prophethood: The Evolving Image of the Spiritual Master in the Eastern Maghrib From the Origins of Sufism to the End of the Sixteenth Century, PhD dissertation, UCLA, (1989), Vol. 1, 62-6.

203.As recounted by H.R. Idris, "Contribution," 172.

204.Ibid., vol. 8 (1934) part 3, 274-5.

205.Mi'yâr, (1), X, 292, 299.

206.al-Mâlikî, in Idris "Contributions," 303.

207.Ibid., 304-5.

208.Ibid.,302-3.

209.S.D Goitein, Letters of Medieval Jewish Traders, (Princeton: Princeton U. Press, 1973), 16.

210.Ibid., 23-5. Goitein mentions that not one letter was found to be written from the Sudan.

211.Ibid., 30, 33.

212.Ibid., 42-5.

213.Ibid., 48.

214.Ibid., 50.

215.Ibid., 73,4.

216.Ibid., 79-80.

217.Ibid., 82-3.

218.Ibid., 85-7.

219.Ibid., 139-42.

220.Ibid.,145-55.

221.Ibid., 163-7.

222.Michael Brett, "Ifriqiya as a Market for Saharan Trade From the Tenth to the Twelfth Century A.D.," Journal of African History, X, 3 (1969), 347-364; and, "Islam and Trade in the Bilad al-Sudan, Tenth-Eleventh Century A.D.," Journal of African History, 24, (1983), 441-59. Mark Dyer, "Central Saharan Trade in the Early Islamic Centuries (7th - 9th centuries A.D.)," as presented at the Trans-Saharan Trade-route Conference in Tripoli in 1979. J. Devisse, "Trade and Trade Routes in West Africa," General History of Africa III, Africa From the Seventh to the Eleventh Century, edited by M. El Fasi and I. Hrbek, (UNESCO, 1988), 367-435. And, Corpus of Early Arabic Sources for West African History, translated and edited by J.F.P. Hopkins and N. Levitzion, (Cambridge: Cambridge U. Press, 1981). There is also a French translation of almost the same texts by Cuoq, completed about the same time as the Corpus, but independently.

223.Devisse, op. cit., 379.

224.Ben-Sasson, 277. the Jewish inhabitants of Gabes who made their living from the land were characterized as follows: "A man with a courtyard but without any money, and a man who has a field but no money. Members of the first class make their living by renting out their property. The second class supports itself by cultivating

its land." And the tax imposed on these was on profits.

CHAPTER 4

TUNIS AL-KHAḌRÂ'

The Early Hafsids

"Then we reached the city of Tunis, the aim of hopes, the confluence of illumination, the resting place of travellers from the West and East, the crossroads of caravans and ships, and the sublime regulator of the entrance of the two lands. Be it that you wish to sail by desert or by sea, it (Tunis) is like a king whose crown is its suburbs and whose environs are a meadow refreshed by a moist breeze..." (Al-ʿAbdarî)[1]

According to Ibn Khallikân, when Yaʿqûb b. Yûsuf b. Abd al-Mu'min became Amîr al-Mûminîn in the western Maghrib after the death of his father, he re-established order in Spain and sent a fleet and an army of 20,000 horses against the Murâbiṭ, ʿAlî Ibn Ghâniya, who had occupied Bijâya in 580/1184. Bijâya was reoccupied by the Muwahhids in 1185. Thus began a long and protracted battle fought on the soil of Ifrîqîya between the two sides. His son, the amîr, Abû ʿAbd Allâh Muḥammad, upon his ascension

to power, "marched into Ifriqiya, routed the troops of Ibn Ghaniya and recovered al-Mahdiya from the lieutenants of that adventurer."[2] The unrelenting procession of military might took its toll on the people and stability of Ifrîqîya as entire villages were destroyed, fields left untilled, and disorder reigned until the establishment of the Hafsid state in 1236/7. With their ascension to power came the reconstruction of the state and economy along paths which diverged from previous patterns.

The image of the first two Hafsid rulers as presented by Brunschvig and others is that of a stable and organized state which fostered the economy and established peace in the region. This may have been true for their capital city Tunis, upon which they lavished expenditures, but the rest of their domains were not stable, and probably not very productive. Agriculture was not a major concern of the Hafsids in the thirteenth and early fourteenth century; and they seemed to make no effort to ensure its productivity, though they did make a great effort to collect the taxes. Commerce, at least along the caravan routes also suffered. Much has been made of the contact between the ruler of Kanem and the second Hafsid leader, al-Mustanṣir, which consisted of gifts being presented to the Hafsid sultan, including a giraffe. However, the description in Ibn Khaldûn, upon which this is based, mentions nothing else of value, nor is there any further

mention in the texts of direct contacts between the Hafsids and the rulers of Mali or Kanem. The sector of the economy which the early Hafsids sought to control was sea trade. Every effort was made to attract foreign merchants, ships, and products to be exchanged, primarily in Tunis. The portion of these profits which the sultan collected as import and export duties was spent to pay the mercenary soldiers, private guards, and bureaucrats, all of whom would take the opportunity, when it was offered, to cheat or connive against the ruler.

The problems faced by the early Hafsids: rebellions, usurpers, famines, and plagues were not unique to their realm. As Ibn Khaldûn pointed out in his Kitâb al-ʿibar, "The caliphate of the east and that of the west had begun to succumb and the voice of imperial power no longer listened to that of his court. The Christian empire had swallowed the centers of Andalus, east and west...in the east, the city of Baghdad,... was taken by the Tartars..."[3] So the situation in Tunis was no worse than that in other urban centers throughout the Muslim world. But the response of the Hafsid ruler al-Mustanṣir and the aristocrats of Tunis was to "seek luxury in clothes, retinue, houses, and furniture..."[4] at the same time that the people in the countryside labored on the lands which had been overrun for a century by armies. This disorder was exacerbated by the growing strength of the states on

the northern shores of the Mediterranean who slowly began to control Mediterranean trade, and build states which no longer depended on a feudal economy.

The degree to which the skirmishes of the latter twelfth and mid-thirteenth century affected the economy and society of Ifrîqîya is difficult to assess. Often the chronicles exaggerated their destructiveness. However, conditions can be ascertained by studying the sequence of events. In the early twelfth century, much of coastal Ifrîqîya was controlled by the Normans who had taken Mahdîya and Jerba in 1143, and allowed their allies, under the Sanhâja Ahmad b. Khurasân, to rule Tunis. Roger II then proceeded to take Tripoli, Gabes, Sfax, and Sousse. In 1159, the Muwahhids sent a fleet of seventy ships and 200,000 men to take Mahdîya and eject the Normans from Ifrîqîya. Al-Tijânî described these forces as having contained over 100,000 horsemen.[5] On the way to Mahdîya, they took Tunis and imposed conditions of surrender on the city and countryside which consisted of turning over almost everything they owned except the clothes on their backs. Jews and Christians were offered conversion or death. However, according to Ibn Shaddâd, the Muwahhids in their march to Tunis did not destroy the crops and fields.[6] The siege of Mahdîya lasted six months, until the beginning of 1160; and, in the end, the Normans surrendered and Muwahhid rule was established in Ifrîqîya.

Abû Sa'îd b. al-Shaykh Abî Hafṣ was installed in Tunis as governor and his brother Abû Alî Yûnus b. Abî Hafṣ was put in charge of Mahdîya.[7]

Other cities in Ifrîqîya were in the hands of independent dynasties until the invasions by the Muwahhids in the 1150's and 60's. Bijâya and the Qal'a Banû Ḥammâd were taken in 546-7/1152-3 by the Muwahhids. The attack on the Qal'a resulted in the destruction of the town and the deaths of at least 12,000 people.[8] Gafsa was held by the Banû Rund, a branch of the Zirids, until 554/1159, when 'Abd al-Mu'min attacked it, and took the members of the ruling family to Bijâya.[9] Gabes, under the Hilali Banû Jâmi' clan, was taken in 555/1160 by the Muwahhids.[10] Tripoli revolted against the Normans and recognized 'Abd al-Mu'min in 555/1160.[11] In an effort to organize his holdings, 'Abd al-Mu'min, according to the Qirtâs, undertook a survey of the land from Barqa to Sûs al-Aqsa, two-thirds of which was subject to the payment of kharâj in grain and coin.[12]

However, Alî Ibn Ghâniya, the Murâbiṭ leader in Mayorqa, invaded in 1184 and established control over much of Ifrîqiya, first taking Bijâya and forming alliances with many Berber and Arab tribes: Banû Hammâd, and Sanhâja Berbers; and branches of the Jushum, Riyah and Athbaj from the Banu Hilal. By doing this, he moved the struggle between the Muwahhids and the last of the Murâbiṭûn, away

from the Murâbiṭ base in Mayorqa to Ifrîqîya. In 1185, when the Muwahhids retook Bijâya, 'Alî Ibn Ghâniya moved south, conquering Tozeur and Gafsa on his way. He then entered into an alliance with the ruler in Tripoli, Qarâqûsh, who ruled in the name of Saladin and the Abbasid caliph. According to Ibn Khaldûn, after Ibn Ghâniya took Tripoli in 1185/6, he continued to wage an unrelenting fight in the Jarîd.[13] In the ensuing struggle between the Muwahhids and Alî Ibn Ghâniya, a major battle was fought outside of Qayrawân in 1187 with Ibn Ghâniya, and his ally Qarâqûsh on one side, and al-Manṣûr on the other. The partisans of Ibn Ghâniya were defeated and they fled south. Ibn Ghâniya fled to Tozeur, where he was followed by the Muwahhids who massacred all whom they found.[14] Alî Ibn Ghâniya then fled to Gafsa. A second version of this story is recounted by al-Tijânî who stated that a battle was fought outside of Gafsa sometime before 583/1187-8 which was indicative of the years to follow. The Muwahhids were defeated, according to al-Tijânî, and those who were not killed in the fighting fled for refuge in Gafsa. Ibn Ghâniya offered them safe passage, but then massacred them. The Muwahhid leader, Al-Manṣûr Abû Yûsuf Ya'qûb, determined to rout the rebels, headed the next expedition himself, according to al-Tijânî, and pushed Ibn Ghâniya south to the region of Tozeur. Gafsa was put under siege by al-Manṣûr, and the city capitulated, the inhabitants

pled for clemency, and the men exited the city, leaving only the women inside. At this point, all the inhabitants were killed and the walls and date palms were almost completely destroyed.[15] Alî Ibn Ghâniya died in 1188, and thereafter, the fight was continued by his brother Yaḥyâ.

Eventually, Mahdîya, Tripoli, Gabes, Sfax, al-Jarîd, Tebessa, and Bone were all under the control of Ibn Ghâniya, at which point his forces marched on Tunis. In the onslaught, numerous villages were overrun, and an eyewitness to the events said that in 585/1190, those who escaped Ibn Ghâniya arrived at the gates of Tunis nude and starving, over 12,000 dying from cold and hunger.[16] However, al-Tijânî attributes the events of 585 to those of 582 when ʿAlî b. Ghâniya, not Yaḥyâ, invaded the area. In 595/1198, ʿAbd al-Karîm al-Rajrâjî of Mahdîya rose up against the Muwahhids, captured the city of Mahdîya, and proceeded to march against Tunis. The troops of Abû Hafṣ were ambushed and massacred on their way to help the governor, and ʿAbd al-Karîm's forces pillaged the countryside. Abû Hafṣ sued for peace, and an agreement was reached which left ʿAbd al-Karîm in charge of Mahdîya. After his return to Mahdîya, ʿAbd al-Karîm decided to eject Yaḥyâ Ibn Ghâniya from Gabes. Their forces met in Gafsa, and ʿAbd al-Karîm was defeated and fled back to Mahdîya, eventually ceding the city to Ibn Ghâniya in exchange for the lives of the inhabitants. He died in

prison and his son was exiled to the island of Mayorqa.[17] In 1203, Yaḥyâ Ibn Ghâniya attacked the city of Tunis. The city was under siege for four months in 1203 before it fell. He levied a ransom of 100,000 dinars from the inhabitants of the city, which he was unable to collect - people preferring to die rather than pay - or perhaps unable to pay. So, the ransom was reduced to 15,000 dinars.[18]

At this point, the new Muwahhid leader, al-Nâṣir, sent troops and a fleet to liberate Ifrîqîya from the control of Ibn Ghâniya. The defeat of Ibn Ghâniya was perhaps inevitable since the Balearics had already been taken by the Muwahhids, and he could not get any reinforcements if needed. The Muwahhid troops were put under the command of the Hafsid, Abû Muḥammad. Ibn Ghâniya retreated south from Tunis to the Nafzâwa region in the Jarîd, in the process exterminating a large number of the inhabitants, burning their homes and belongings.[19] Al-Tijânî recounted the ravaging of Thora, where most of the inhabitants were killed, all the riches were confiscated, the houses destroyed, and the young women raped.[20] Ibn Ghâniya retreated further into the region of Matmâta on his way to Jabal Dammar near Tripoli. The two forces ultimately met in the battle of Tâjra, near Gabes, where the troops of Ibn Ghâniya were decimated, and the banner of the Muwahhids flew once again over the ramparts of

Ifrîqîya in 602/1205.[21] In the fighting, many people were killed and prisoners were taken. Abû Ishâq, the brother of al-Nâsir, was sent to the regions south and east of Tripoli in 1206/7, where he massacred a number of the inhabitants of the Jabal Nafûsa and Jabal Dammar. He continued as far as Barqa in pursuit of the enemy and sent a caravan of captives back to al-Nâsir.[22] However, the family of Ibn Ghâniya was able to flee the carnage. Abû Muḥammad fought Ibn Ghâniya again in 604/1207-8, and defeated him. From his exploits in Ifrîqîya, Abû Muḥammad sent to the Muwahhid ruler, al-Nâsir: 200,000 pieces of gold, 1,800 robes, 300 swords, 100 horses, and many other objects.[23] Stories of Ibn Ghâniya reappear in 609\1212 when Yahyâ b. Ghâniya took Waddân and crucified his former ally Qarâqûsh[24], who had taken refuge there; and established himself as the master of this region. This was a significant move since one of the major caravan routes through the Sahara passed through Waddân, and this probably kept the new Hafsid leader, Abû Zakarîyâ' from completely controlling the southern part of Ifrîqîya. Yaḥyâ conquered Alger in 1227 temporarily; but, it was not until his death in 1237/8, or 631/1233, according to Ibn Khaldûn,[25] that Ibn Ghâniya and his family ceased to be important in the politics of Ifrîqîya. By this time, the Muwahhidûn in the Maghrib had ceased to be important as well.[26]

The battle between the Banû Ghâniya and the Muwahhids was largely fought in Ifrîqîya. In the process of taking cities and attacking towns, the countryside was ravaged, people massacred, and towns destroyed. The sequence of events is perhaps not as important as the effect they had on the region. The account of al-Tijânî, from which many of the events described above can be ascertained, clearly describes some of the damage inflicted on the towns of Gabes, Gafsa, Tozeur, and Tunis. The Hafsids, when they broke away from Muwahhid control in 626/1229, had to deal with the disruption of agriculture and trade which the last seventy-five years had wrought without the benefit of money from the Maghrib to cover their expenses.

The Hafsid successor to the governorship of Ifrîqîya in 625/1228, Abû Zakarîyâ', broke ties with al-Ma'mun in 1229, and ordered the khuṭba to be announced in the name of the Mahdî, Ibn Tûmart. He then marched on Constantine in 629, taking it, and Bijâya. Bijâya was an important entrepot for Saharan trade coming from the west, and Mediterranean trade from the Italian city states. Next, he defeated Ibn Ghâniya in Wârgla, another Ibâḍî stronghold on the caravan route south, and put the rest of Ifrîqîya under his control. By 634/1236-7, he had declared his independence from the Muwahhids.[27] The Andalusi states rushed to recognize his authority and seek his aid against the ultimately successful onslaught of the Christians.

Valencia and Murcia were sent a ship with food, arms and money, of an estimated value of 100,000 pieces of gold.[28] Briefly, when the Hafsids occupied Tlemcen, the Muwahhid governor of Sijilmâsa declared his allegiance as well in 640/1242.[29] The Hafsids thus controlled all the ports along the Mediterranean, including Ceuta (Sebta), and the major desert communities which were exit points for the Saharan gold trade. If the Hafsids had been able to maintain control of Tlemcen and Sijilmâsa, they would have had a monopoly on Saharan trade coming from the west and east. This was not to be, instead this trade route reverted to the Merinids, and finally it was intercepted by the Portuguese and Spanish. The eastern portion of Ifrîqîya continued to be troubled by the Khârajî Berbers dwelling there. So, under the early Hafsid rulers, maritime trade was intensified as ties with the new Kingdom of Aragon, Marseilles, and the Italian city states of Venice, Genoa, and Pisa were solidified by treaties dating from 1231 with Venice, 1234 Pisa, and 1236 Genoa.

Abû ʿAbdallah Ibn Abû Zakarîyâ', known by the name al-Mustanṣir, took over after the death of Abû Zakarîyâ' in 1249, ruling until 1277.[30] Under his rule, Ifrîqîya became the strongest Muslim state in the region. Al-Mustanṣir even gained the title of caliph from the sharif in Mecca for a year in 1259 when the Mongols executed the Abbasid caliph. However, al-Mustanṣir could not alter

geographical "realities." Ifrîqîya remained on the periphery of the Muslim world as far as the Islamic center was concerned. Instead, it became part of the circle commanded by the Italian city states and the kingdom of Aragon. Al-Mustanṣir formed close ties with the Kingdom of Aragon, granting them preferential trading agreements, funduqs, and even the permission to construct churches in Tunis.

Ibn Khaldûn described the rule of al-Mustanṣir in great detail in his Kitâb al-ibar. His entourage was composed of only Christian slaves and Andalusi aristocrats. The best positions in the government were given to Muwahhid shaykhs. Under his direction great public and private projects were constructed. An extensive park for hunting with his falcons, and dogs was constructed near Binzert. A high wall was constructed around the palace garden to protect the harem from the eyes of passersby, and a pavillion was erected for receiving tribute in the courtyard of the palace. The pleasure garden of Abû Fihr outside Tunis was constructed with water carried to it by the qanṭara from Zaghwân. It was filled with trees and fruits of every variety.[31] However, neither al-Mustanṣir nor Abû Zakarîyâ' ordered projects constructed that would have benefitted the countryside or agricultural production. All the money was spent on efforts to aggrandize their regimes, impress

foreign merchants and consuls, and keep the people in the capital of Tunis quiet. The Sahil with its olive and wheat production came to be dominated by Arab tribes who used the Berbers to work their land, or converted it to pasture for their animals.

The fiscal stability of both the regimes of Abû Zakarîyâ' and al-Mustanṣir was not at all sound. When Abû Zakarîyâ' came to power, according to Ibn Khaldûn, the taxes on the Berbers had never been fixed or recorded in the diwan.[32] And since there had been many years of disorder, taxes had probably been gathered by militia under the control of local leaders; therefore, there was no stable procedure for collecting them. During the reign of al-Mustanṣir, tax collectors were appointed, one of whom was executed based on accusations of cheating. This individual, according to Ibn Khaldûn, al-Lulyânî, had been obliged to accept the position in the first place.[33] Gold may also have been in low supply. Al-Mustanṣir resorted to minting copper and silver coinage at the beginning of his reign.[34] The reason for the minting of copper coins called ḥandûs similar to the fulûs in the east was, according to Ibn Khaldûn, to facilitate buying and selling in the market. However, those responsible for the minting, issued coins which varied as to purity and weight and al-Mustanṣir had them executed. The people demanded an end to the copper coinage, revolted, its production was halted,

and the rebels were given amnesty by the government. These events demonstrate clearly that the government did not have tight control over the minting of money or the collection of taxes. Also, they let others take the blame for the copper coinage which they had ordered in the first place. The debasement of the coinage, and the effort to stop minting so much gold under al-Mustanṣir was indicative of the lack of gold flowing into the diwan. After the attack of Louis IX, the Hafsids paid an indemnity in gold which they exacted from the citizens by force, and never completely paid.[35] Five years after the attack on Tunis by Louis IX, al-Mustanṣir also issued money the equivalent of a tenth or a twentieth of a dinar, whereas later Hafsid coinage was divided into quarters and eighths.[36] A fatwâ of Ibn Mahriz of Bijâya (d. 1257), related a question posed to him regarding the coinage during the reign of al-Mustanṣir. If a man sold his crop of wheat, oil and dates and was paid in money struck at the sultan's mint, which had been placed by him into the hands of an unjust person, could he use them to go on pilgrimage? Ibn Mahriz stated that to use these dirhams would be very serious. One could not use them at all to pay for the expenses to go on pilgrimage.[37] This ruling indicates that both the ʿulâma' and the people were concerned with the monetary situation. Obviously the people were not in favor of the monetary "reforms" of al-

Mustanṣir.

The continual monetary crises faced by the Hafsids are a good indication that the amount of gold they may still have been getting from Saharan trade was small. By 737/1337, al-ʿUmarî mentioned the money used in Ifrîqîya as being comprised of old dirhams: mixed with copper. The new were pure, if they could be found, which he stated they could not.[38] The problem of false coinage, or the incorrect weight was also a problem later in the fourteenth century when Ibn ʿArafa actually condemned people found guilty of minting false money, dirhams, or dinars to life imprisonment until death.[39] By the beginning of the fifteenth century, Hafsid gold coinage was inferior to that of Egypt.

Where did the revenues of state go under Abû Zakarîyâ'and al-Mustanṣir? A good portion of them were spent on paying their private militias. The rest was spent on building programs which were primarily monumental improvements to the city of Tunis. Abû Zakarîyâ' had the Qasba and its mosque constructed, along with some new walls and gates to the city. Al-Mustanṣir had the Roman aqueduct of Hadrian in Carthage repaired.[40] It extended 132 kilometers and provided 32,000 cubic meters of water, 320 liters a second. The point of the restoration was to provide water for the city of Tunis and the gardens of the royal palace of Abû Fihr. According to Solignac, the

originality of the work of al-Mustanṣir resided not only in increasing the 116 kilometers of the aqueduct to 132, but also in constructing a complementary aqueduct into the city of Tunis, the aqueduct of the Bardo.[41] A unique aspect of the engineering of this aqueduct by the Hafsids was its zigzag path, an Arab invention according to Solignac, which slowed down the flow of the water. However, twenty years after the death of al-Mustanṣir, this source of water was insufficient for the inhabitants of Tunis according to al-ʿAbdarî. Water projects were not constructed again until the reign of Abû Fâris ʿAbd al-ʿAzîz (796/1394-837/1434) when two major projects were constructed: the sik'aya outside Bâb al-Jadîd for people and animals; and a majil (reservoir) in Muṣallâ al-ʿIdayn in Tunis, a vast monument feeding two fountains one constructed of copper pipe where the water was drawn up by a vacuum.[42] However, even when Leo Africanus visited the city in the sixteenth century, Tunis was still reliant on rain water in cisterns for its drinking water.

Al-Mustanṣir was an arrogant and demanding ruler. He would not tolerate insults, and when the poet, Ibn al-Abbâr intimated he was a drunken tyrant in a poem, he had him executed.[43] He also spent most of his reign trying to prevent rebellions of Arab tribes, and dealing with economic problems exacerbated by the rising power of Christian states in the Mediterranean. The most famous

incident is that of the crusade of Louis IX against Tunis in 1270, which failed when Louis and his troops died of disease within a month of landing near Carthage. The reasons for this invasion have been much debated, however the results have not. Al-Mustanṣir, possibly fearing the departure of his Arab reinforcements for southern pastures, and unable to gather the full support of Ifrîqîya, settled with Charles of Anjou, and concluded a treaty which levied a tribute on the Hafsid state and gave commercial concessions to France, Sicily and Navarre. The upsurge in commercial activity was evidence of the astuteness of this decision in the short term. In the long term, it was a harbinger of the problems which would plague the Hafsids until the sixteenth century: lack of control over the interior and the caravan trade, and increasing dependence on Mediterranean trade for revenues. The situation was so unstable in the thirteenth century that the qâḍî in Bijâya, Ibn Maḥriz (d. 655\1257), recommended for those considering undertaking the pilgrimage, that they should go by sea in a Christian ship, rather than go by land. Both were dangerous, but one less than the other![44]

After the death of al-Mustanṣir, the Hafsid state entered a period of struggle which did not end until 1309. Family rivalries, the demands of the Arab tribes, struggles among the Andalusis, Arabs and Hafsids, and

increasing European interference marked this era of instability. After the death of al-Mustanṣir, the Hafsid contenders for power turned to the Arab tribes to support their cause. Ibn Khaldûn described this in detail, probably, as he proudly pointed out, because it was his grandfather who helped Abû Hafṣ ʿUmar escape from Tunis when the pretender to the throne, Ibn Abî ʿUmâra, took Tunis and Abû Isḥâq, the Hafsid leader fled to Constantine and then Bijâya. Abû Hafṣ ʿUmar fled from Tunis, taking his three trusted companions, who alternately carried him on their backs, since he had been wounded, until they reached Qaṣr Sinân. Ultimately, Abû Hafṣ ʿUmar was the victor, and in 1284 ascended to power. However, he owed favors to the Banû Sulaym who had supported him in his bid for control. Once in power, instead of paying them, he awarded them iqtâʿ in exchange for military service. These grants strengthened the power of the Arabs and weakened the ability of the state to collect taxes. This innovation by Abû Hafs is another indication of the lack of money in the treasury to pay for military service and it led to several problems. First, the Arab tribes became power brokers whose internecine feuds became part of the scene. Second, the Hafsid's lost control of the tax revenues from these areas, while the Arabs either neglected agriculture or forced the inhabitants to work their land. And, finally, more Arabs gained positions within the

government. A fatwâ issued after Abû Hafs entered the city of Tunis outlines the attitude of the citizens to this situation. On the day he took control, all the ʿulamâʾ of Ifrîqîya were asked whether it was legitimate to refuse to buy grain from the Arabs because when Abû Hafs put Tunis under siege all the Arabs dispersed through the villages in the surrounding areas, stopping goods, and closing the roads. How this grain was obtained, whether by the Berbers, from whom the Arabs might have confiscated it, or the Arabs themselves, is unclear from the text. When Abû Hafs came into power, they brought their grain to market, and the people refused to buy. The ʿulamâʾ stated that it was permissible not to buy their grain.[45] The people and the Mâlikî ʿulamâʾ were opposed both to the growing strength of the Arab tribes and the sale of what had probably been their grain confiscated by the Banû Sulaym as they roamed the regions around Tunis.

There are two trends which marked the countryside of Ifrîqîya during the thirteenth and fourteenth century. One was a progressive depopulation, and the other was deterioration of agriculture. One of the earliest eyewitness accounts to conditions in the thirteenth century is the Riḥla of al-ʿAbdarî. The author set out from the western Maghrib with the pilgrimage caravan in 688/1289.[46] al-ʿAbdarî left the Atlantic coastal region of Ḥâḥa in 688/1289 to perform pilgrimage in Mecca and

reported in his Rihla that the road to Tlemcen was harassed by robbers, and caravans could only pass if they were well armed.[47] For the people of Tlemcen he had nought but criticism, especially of its ruler, Abû Sa'îd Uthmân, the son of Yaghmurâsin (ruled 1282-1302), who was so stingy that he only gave one dinar to each pilgrim.[48] As he set out, al-'Abdarî described the beauty of the countryside until he reached the regions near Tlemcen where the route was filled with dangers and brigands, and caravans could not travel without an armed escort. However, it was not until after he had passed by Mîla that he commented on the ruins and the depopulation of the region.[49] When he arrived at Constantine, he found a town suffering from the ravages of attacks.[50] Constantine, once a beautiful city surrounded by verdant pastures, was now surrounded by dry and neglected fields.[51] Bijâya had become a desert, with its inhabitants lodged behind the high stone walls of the town![52] A fatwâ issued by 'Îsâ al-Ghubrînî (1246-1315) of Bijâya, he states that even if a man killed a robber he could still be imam because he had committed a meritorious act.[53] Bone he found under attack from a Christian fleet, which took prisoners and then held them for ransom.[54] Beja resembled a desert, the people having fled from the Arabs. He stayed only one day before continuing to Tunis.[55] Tunis he described in glowing terms. It had beautiful and imposing buildings,

houses of stone, doors encased in marble portals; however, water was rare and they used cisterns to collect rain water. Water was brought from Zaghwan, carried in lead pipes, to the palace and gardens of the sultan, and for the Jâmi'a al-Zaytûna. The aqueduct at Carthage he described as one of the wonders of the world.[56] However, he was more interested in the scholars he met than the markets or gardens. On his return trip he stopped at Gabes, and Nafta, and took the road from Qayrawân through the Sahil where there were once forests of olives heavy with fruit and from which they pressed a good oil like that of Syria, however they were ruined and the inhabitants got oil from Jerba. The Riḥla of al-'Abdarî is fascinating both for the descriptions he offers of the people he met and the places he stayed, as well as for the poetry he included to illustrate his descriptions. Tunis, alone, was prosperous and green.[57] The impression left by the Riḥla of al-'Abdarî is that of both a highly critical writer, and, at least along the northern coast, a land from which the people had fled and agriculture was less productive than in earlier centuries.

The picture painted by al-'Abdarî is confirmed by the account of the scholar al-Tijânî, who accompanied the Hafsid wazir, al-Liḥyânî in 1306 on his ḥajj. Since it was a long journey, interspersed with many stops along the way to collect taxes or visit supporters, al-Tijânî had ample

time to write down his impressions, gather historical details, and acquire anecdotes. He does not, however describe the difficulties which led al-Liḥyânî to flee the city using the pretext of the hajj after he had negotiated an agreement between the rival contenders for power. The new leader then resorted to minting silver coinage, and a debased gold piece, which was an indication of the weakness of the state.[58] Unfortunately, al-Tijânî only accompanied the shaykh as far as Tripoli, where he fell ill and had to return. Al-Liḥyânî continued on the ḥajj, returning five years later to become sultan.

The original plan was that al-Tijânî would go south to the Jarîd with one group to collect taxes, while al-Lihyânî went to Jerba to recapture it from the Christians. The taxes would be sent to the capital and then they would join together on the way to Tripoli and make the ḥajj. However, al-Tijânî, after collecting the taxes, ended up accompanying al-Liḥyânî to Jerba. And instead of taking the coastal route directly to Tripoli, they took a detour into the interior and stayed with different Arab leaders to escape the plague raging along the coast.

The first stop made by the entourage was Rades, a community not far from Tunis originally settled by many of the Copts employed by Ḥasan al-Nu'mân to build the fortifications of Tunis.[59] It was surrounded with lush green fields and grape vineyards. From here they travelled

to al-Hâmat al-Jazîra, and Mornag. The stop at al-Sharik began the description of decay in Ifrîqîya. This peninsula in al-Bakrî's day was rich in fruit and vegetables. When al-Tijânî saw the island, the manâzil had fallen into ruins. This he attributed to the struggles with Ibn Ghâniya.[60] In 582, 'Alî Ibn Ghâniya had attacked Manzil Bashiq, and the inhabitants offered to surrender and asked for protection. But, when he entered the village, his troops destroyed everything they found, even stealing the clothes off their backs. Then bands of blacks and Arabs forced them from their homes and they fled to Tunis, some 12,000 dying on the way.[61] Most of them still had not returned to the region.

The next territory they entered he termed the manâzil of the Arabs. These were the territories originally given to individuals under the Zirids. However, the Banî Dillâj and al-Riyâh of the Banû Salîm had territories there now. These lands had been acquired by them from other Arabs whom they displaced, probably during the reign of Abû Hafs.[62] Al-Tijânî criticized them for destroying the villages in the region. Finally they arrived at Sousse, a city with a noble past, which he described as being in ruins. Adorne, in 1470, also commented on the destruction of Sousse. When Adorne stopped there he met two Genoese merchants living in their funduq in which they had a gazelle and an ostrich, but not much else.[63] The cisterns

outside the city were in ruins. The only redeeming feature were the figs.[64] Monastir, which al-Tijânî referred to as "one of the doors of paradise," did not merit a description. Adorne mentioned that in his day it was inhabited by marabouts.[65] Many of the hillsides along the way were dotted with the ribats of pious groups, or the refuges of hermits and ascetics; and the citizens of towns and villages hid behind their walls at night.

Once al-Tijânî left Sousse, they passed through the territories of the Ḥakîm, and Ṭarûd, where he noticed that a good number of the fortifications in the area had been destroyed by the Arabs during the reign of Muʿizz b. Bâdis. They came to an area outside el-Djem, inhabited by Berbers where there were numerous gardens, planted fields, a mosque, and well frequented markets. Then they entered the territories of the Ḥaṣan, which marked the beginning of the Sahil. They marched through vast and ancient plantations of olives, the majority of which had been devastated by the Banû Hilâl, thus altering the symmetry of the rows.[66] However, the orchards still remained and they stopped for a rest in the middle of them, and to gather wood for the next day in case they could not find any.[67]. This precaution would have been unnecessary if the Sahil region were still as lush as it had been in the past. They reached Kerkena, which was in the hands of the Christians. Sfax was still protected by its walls and

ramparts. South of Sfax the inhabitants were members of the Banî Hilâl. Finally they reached Wazarîf, where there were dates, springs and a fortress.

When they reached Gabes, al-Tijânî described with an air of relief the green verdure of trees, houses and date palms, suburbs, markets, and a moat surrounding the city which could be filled as a protective measure. It had a river to irrigate the gardens which they fertilized with excrement. The principle gardens were between the town and the sea. The bad thing about Gabes was that it suffered frequently from the plague and other diseases, to the point where many of the inhabitants were jaundiced from malaria.[68] Al-Tijânî noted the smell of stagnant water and disease which permeated the town. Inside the city was the jâmiʿa and a citadel which was in ruins from the fight between Ibn Ghâniya and the city. Gabes had to pay Ibn Ghâniya 60,000 dinars, and he controlled it until 601 A.H..[69] On al-Tijânî's return to Gabes after collecting the taxes, the plague had struck and they had to avoid entering the town.[70] There was one reminder here of the first Hafsid ruler in the remains of the suburb of Kitâna, built during the time of Abû Zakarîyâ', where olives had been planted which were irrigated by a spring which emptied into a cistern and divided into four small streams in the gardens.

The entourage then entered the lands of the Khawârij,

who were described by al-Tijânî with fear and loathing as attacking people on the route and stealing their belongings. They dominated the territories between Gabes and Tripoli.[71] They reached the Wadî Majissir and then crossed over to Jerba, which was known for the best wool for cloth, many olives, grapes and figs. However, the inhabitants lived in palm huts. The main town was a desert, and so they camped on the beach of what had once been one of the most productive agricultural and commercial regions in Ifrîqîya.

Because of the pestilence in Gabes, al-Lihyânî took a detour into the mountains, where he was offered hospitality by the chiefs of the Mahamid and Jawarî. They stopped in Ghûmrassen to visit the first, who offered them protection. However, Ghûmrassen was located high in the rocky cliffs, where the people lived in caves or homes partially cut out of the rock, and where it was almost impossible to pitch their tents.[72] They stayed there for three months during the summer, which must have been an uncomfortable experience in the arid, rocky region. Al-Tijânî described the gardens grown in pockets of soil between barren cliffs as being watered by means of a gharârîr in order to grow millet and some dates. In the season of the rains they would capture the torrents coming off the mountains and lead it off in small canals toward the fields.[73] The water control techniques were the same

described by archaeologists for the region in the pre-historic era.

Al-Lihyânî intended to leave Ghûmrassen and head on to Tripoli to catch the Maghribi caravan which would reach there in the fall. However, there was famine on the way to Tripoli from Barqa. The news reached the entourage that only a few people had lived to tell the tale of a famine which had led the caravan of 900 to eat snakes, poisoning many of them. The bodies of the dead were even sold for food.[74] So, al-Lihyânî turned south of Tripoli to stay with the Arab tribe of the Jawâr, with whom he spent the fall before moving to Tripoli for the winter.

The experience of al-Tijânî shows both the rigors of travel in his day, even in a royal entourage, and the conditions of Ifrîqîya. Many of the major sites from the Aghlabids and Zirids were in ruins, with the fields, date palms, olives and walls yet to be repaired. Food was hard to obtain, famine and disease were prevalent, and even wood for the cooking fires had to be gathered where it could be found. The hospitality of the Arabs in the south, was in contrast to the destruction, and animosity they had caused in the north.

The feuds between the members of the Hafsid ruling family in the beginning of the fourteenth century resulted in the seizing of power by different members of the family in different cities throughout Ifrîqîya. In the 1320s, the

Hafsids aligned themselves with the Merinids in an attempt to strengthen their position in Tunis. According to al-ʿUmarî, they employed black slaves in the military guard.[75] These he called Ganâwa, which may have meant they were from Ghana. If so, then the Hafsids may have had contact with that region. However, the term was used quite loosely in the texts which refer to them. The Merinids, in turn, occupied Tunis in 1346, while the Hafsid princes were busy fighting amongst themselves. The only thing which really defeated the Merinids was the Black Death ravaging the city of Tunis. The degree to which the plague affected the city and its people is evident in several fatwâs of Ibn ʿArafa (d.803/1401) in which he allowed impure food to be used, rather than discarding it. He dealt with three different cases. In the first, he was asked if green vegetables fall into the dirt of a rat, can they be eaten? He declared that if they were washed it was acceptable.[76] The second question related to what to do if a mouse falls in the water being used to make pasta. Can it be used? His answer specified, that if it were a time of famine, then the pasta could be purchased at a low price and used for the people in the prisons.[77] Finally the third question related to olives in which a dead rat has fallen - can they be used. And he answered no because not even the Christians will use them.[78]

Disorder was so prevalent in the latter part of the

fourteenth century that Ibn ʿArafa was consulted by the imam Abû Abbâs Ahmad on the subject of troops of Arabs roving around the countryside pillaging the poor. He was told that there existed in the Maghrib a group of Arabs, about 10,000 or more who were robbing the poor and killing them and taking their goods, and raping their women. The sultan was too weak to stop them. In fact, he was obliged to use them, but they refused to send the taxes or oversee justice. Because of this even the caravans could not pass safely. Ibn ʿArafa stated that it was licit to declare jihâd on them, and al-Ghubrînî agreed.[79]

The sector of the economy which had been the most essential for centuries in Ifrîqîya was agriculture. The wealth of the Romans and the prosperity of the Muslim states in the medieval period had relied on a continual production of wheat, oil and other crops. The productivity of farming had relied on the stability and protection of the state, as well as labor to work the land. Both of these were lacking in the early Hafsid period. Many of the most productive lands in the Sahil and the region around Tunis had been affected in the fighting of the thirteenth century. Other areas were given as iqtâʿ to Arab tribes, who, some of whom were agriculturalists, and some, like the Banû Sulaym were not. Famines were therefore all too frequent in the early years of the Hafsids.

An indication of this reversal in the fortunes of

Ifrîqîya can be seen in the importation of food items from other parts of the Mediterranean to Tunis, Bijâya, and Tripoli. According to documents in the Crown of Aragon Archives in Barcelona, numerous shipments of oil were sent to Tunis from Mayorqa, Barcelona and Valencia in the late thirteenth and early fourteenth centuries: in 1285, 1291, 1302, 1303, 1316, and 1318, if not more.[80] Many of the ships whose cargo is listed in those years also carried wheat.

The information which exists with regard to agriculture is sparse. The percentage of fatwâs from the Hafsid period related to irrigation or farming in the Mi'yâr is much less than those of earlier periods. The great Hafsid jurists of the thirteenth and fourteenth century were centered in the mercantile cities of Tunis and Bijâya, not Qayrawân, Mahdîya, or Gabes, where the intricate irrigation systems of the past were operated.

The description of agricultural production under the Hafsids in Brunschvig's work is largely drawn from writers like al-Idrîsî, the Istibṣâr, and Leo Africanus. The first two used information from the eleventh century to write their books. The third was writing about the end of the Hafsid period. It is possible to assume that there is a degree of continuity in the types of crops grown and the methods used to farm and irrigate. However, the question is in what ways was there continuity or change?

In al-ʿUmarî's Masâlik al-abṣâr compiled in 737/8-1337/8 he listed the crops produced in Ifrîqîya, some quite different from those recited by earlier writers. He added to the well known staples of Ifrîqîyan production considerably. The new crops were: hummus, lentils, peas, pomegranites, safarjil, peaches, apricots, white and black mulberry, plums, cherries, citron, lemons, limes, walnuts, melons, cucumbers, turnips, eggplants, cauliflower, cabbage, thyme, and basil.[81] Perhaps some of these crops had existed in the past, but they were not mentioned in the texts. Many of these crops were grown in Andalusia, and they were probably introduced from there. But the other aspect of these crops is the fact that they required care and intensive labor. Al-ʿUmarî, of course, spent most of his time in Tunis, and he probably was describing the produce in the market and not in the field. This is most evident when he discusses the flowers, and refers to them as perfume, not blossoms.[82] He also mentions that malukhîya is rare in Ifrîqîya, however, malukhîya was common in the Sudan, and Egypt. He mentioned that rice was not grown there, and the sugar cane they grew they did not know how to press, an observation later repeated by Leo Africanus.[83]

Much of the information in Leo Africanus on agriculture seems identical to that of Al-ʿUmarî. However, he does some make interesting observations about the

people and their way of life. On one occasion he went with the sultan of Tunis to Numidia (south of Constantine) and discovered that the region had been "devastated by the Arabs" and had begun to be repopulated, but poorly. The inhabitants were also heavily taxed by the Hafsids.[84] Taxes also weighed heavy on the people of Sfax, Mahdîya, and Qayrawân. And, Qayrawân, once the great producer of wheat in Ifrîqîya, had to import grain.[85]

The irrigation techniques employed in the early Hafsid period which were described by observers seemed no different than those used for centuries in the region. Al-Tijânî described the system used in Tozeur exactly as it had been described by al-Bakrî, three centuries earlier. They used springs in the sands which formed a river outside the town, then separated into streams. The partition of the water was fixed by the amîns who determined the amount to flow by the hours of the day and night. These water canals turned a number of mills. al-Tijani also noticed the system of water in Ghûmrassen, where mountain rains were directed by canals into gardens. There were no references to specific water control techniques introduced from Andalusia.

The majority of fatwâs issued by Ibn ʿArafa and others related to water concerned urban water structures, not rural ones. An example is a fatwâ of Ibn ʿArafa (830/1401) related to the installation of waterpipes.[86]

People asked the inspector of the habûs of a mosque, the nâzir, to allow them to pipe water from the mosque into their homes. The use of the water was authorized providing the walls of the mosque would not suffer from the digging of the pipe. Also, the quantity of water was to be fixed and calculated by the use of qâdûs in pottery or qaṣab or some other material. A further stipulation was that they would pay a just price. This example shows how a device originally used for measuring the irrigation of fields had eventually become an instrument used in an urban structure. In another case, a mosque had a cistern filled by a canal (sâqiya) which crossed the town and served the inhabitants when they lacked water, which was often since it did not rain a lot. Each street had a pipe and each house had a qâdûs. When the pipe needed to be cleaned out the inhabitants would be taxed two to four dirhams for the cleaning.[87] Thus, it had become common practice by the Hafsid period to have waterpipes in homes, regulated by timing mechanisms, and taxed by the municipality for their upkeep.

It was during the Hafsid period, as well, that regulations regarding urban architecture became important in the city of Tunis. A fatwâ of Ibn Ghammâz (d.693\1293) of Tunis was issued regarding the installation of a mill within a house. Whether it was a special kind of mill is unclear in the text. The man who wanted to install the

mill in his house wanted to know how far away from his neighbor's wall could it be constructed.[88] In another case, Ibn ʿAbd al-Râfî (d.781/1379) of Tunis was consulted by an irate neighbor over the case of a mill inside his neighbor's courtyard.[89]

The density of population in the capital city, or the disagreements between neighbors in Tunis, increased to the point that any pretext became clause for complaint. In one case it was a neighbor making vinegar in his house. In another case, a window on a courtyard became the cause of a dispute. In the latter case, Ibn ʿAbd al-Râfî was asked his opinion on an addition of a room with a window to a home. The man built the window so it opened onto a view of his neighbor's terraces where they hung their laundry. [90] Al-Râfî stated that the man had to block up the window so as not to intrude on his neighbor's privacy. This increase in urban property disputes in Tunis was not unusual since the capital had the highest density of population, and it was the safest place in Ifrîqîya.

It is in business transactions, primarily in Tunis, that the fatwâs of the period are the most informative. Many of them relate to issues which had developed over the years in Ifrîqîya: partnerships, commenda, letters of credit, loans, and debts. What is more prevalent though, are the number of cases related to piracy and shipwrecks. For example, the ʿâlim, Al-Bunî (d. 1225) was asked about

the situation of a man who had received forty dinars as qirâd on the condition that he return with the money after his return from his business journey from Sfax to Tunis. He arrived in Tunis, and used the forty dinars to buy goods. He went by sea with his merchandise, but he was seized by the enemy and all his goods were stolen. Who was responsible for the money?[91] Did the loss have to be paid from his account, totally, partially, or not at all? In another case, Ibn ʿArafa was asked about a man who had died while on a journey, and before he died he gave his goods to someone else to give to his heirs. Did the one to whom he gave the goods have to carry out his bequest? In this case the answer was in the affirmative.[92] The problem of people absconding with the merchandise of others must have been a problem at the time.

There was also the issue of trying to avoid paying import duties and taxes. Ibn ʿArafa was asked about a man who received as deposit some merchandise to take with him to Alexandria. Before he arrived, he placed it in another place in the hold of the boat, and he escaped paying tax on it. Then when he tried to take it off the boat, the collector of duties discovered him and confiscated the goods. Who was liable for the loss, the depositor or the one to whom it had been given to take to Alexandria.? The one who took it was held responsible for the losses.[93] Many others tried to hide animals or crops from the tax

accessors, obviously trying to avoid the onerous taxes collected by the representatives of the sultan who were often skimming off the top in the process.

The fatwâs in Wansharîsî's Mi'yâr from the thirteenth through the fourteenth century, and the other examples presented here show clearly several trends in the Hafsid economy. First, the center of economic activity was commerce in the Mediterranean, a commerce which was dangerous and over which the Hafsids could only gain a share by making treaties, and making foreign traders welcome in their ports. In contrast, they had few representatives in foreign ports. Second, the government made its money through exactions at the port, and on taxes collected by force. Third, the productive agricultural base had declined. And fourth, the people resented the early Hafsid rulers, revolted on occasion, and tried to avoid paying their taxes when at all possible. And finally, none of the Hafsid wealth was returned in the form of spending which would greatly benefit the people.

When, Al-'Abdarî set forth on the 25th of Dhu Qa'da in 688/1289 from Hâha in the Maghrib, he passed through Tunis and other lands under Hafsid control on his way to join the pilgrimage caravan making its way to Mecca. The beauty and prosperity of Tunis, and the erudition of its scholars was praised profusely by the pilgrim, even though he judged the current Hafsid government to be weak.[94]

Tunis, the main seat of government for the Hafsid state, was depicted by other travellers and historians of its day as a bustling entrepot for commerce and scholarship. Ramon Llull preached and King Louis IX perished here in the thirteenth century. It is here that al-Tijânî started his journey to Mecca in 706/1306, and where Ibn Battûta stopped in 1325 and was chosen as the qâdî of the pilgrimage caravan[95]. The lustre of Ibn Khaldûn and Ibn ʿArafa in the fourteenth century are associated to this day with the honorable heritage of Tunisia. Yet, despite the erudition of its scholars, the state was not based on a productive agricultural base or a sound economy.

The base of the Ifrîqîyan economy, agriculture, had been greatly destroyed by the twelfth century. The Sudanese gold trade had begun to dry up, population had declined, agriculture was still reeling from the shock of increased pastoralism, and Mediterranean trade was more and more in the hands of Europeans. Governments, like the Hafsids and Merinids resorted to increasingly onerous taxes and duties on imports and exports to support their military and maintain their bureaucracy. Tunis itself was flourishing because it became an international port of call, and was a strategic point for shipping and piracy. The Hafsids built up the appearance of the city by endowing mosques, masjids, and constructing pleasure gardens. However, they did nothing to increase the long-

term productivity of the economy. In fact, they did the opposite by imposing heavy taxes, and taking land away from its owners to grant to Arab tribes. Yves Lacoste called it a period of crisis for Ifrîqîya; Abun Nasr described the Hafsid state as weak; Brunschvig described agriculture under the Hafsids as suffering from the iron grip of draught and nomads, while trade was limited by religious prohibitions; and Talbi summarized the period as characterized by a diminishing of agriculture, aboriculture, and population, perhaps as much as two-thirds.[96] These descriptions perhaps understated the difficulties faced by Ifrîqîya by the thirteenth century.

1.Abî 'Abdallâh Muḥammad al-'Abdarî, Riḥla al-'Abdarî, edit. Muhammad al-Fasî, (Rabat: Jamî' al-huqûq, 1968), 39.

2.Ibn Khallikân, Wafayât al-a'yân wa-anbâ' abnâ' al-zamân, translated by M. G. de Slane, Ibn Khallikan's Biographical Dictionary, (London, 1843-71), III, 345.

3.Ibn Khaldûn, 'Ibar, VI, 675.

4.Ibid., VI, 676.

5.al-Tijânî, Riḥla, 340.

6.Ibid., 341. Kitâb al-Istiqsâ', III, 85.

7.al-Tijânî, op. cit., 345-50.

8.Kitâb al-Istiqsâ, III,62-3.

9.Ibn Khaldûn, Berberes, 33-5.

10.Ibid., 35-7.

11.Ibid.

12.Abû 'Abd Allâ]h Muḥammad ibn al-Ḥalîm (Ibn Abî Zar), Kitâb al-anîs al-mutrib bi-rawḏ al-qirṭâs fî akhbâr mulûk al-maghrib wa-târîkh madînat Fâs, translated by A. Beaumier as Roudh el-Kartas; histoire des souverains du Maghreb et annales de la ville de Fès, (Paris, 1860), 281.

13.Ibn Khaldûn, Berberes, II, 210.

14.Ibn Khaldûn, II, 211. Kitâb al-Istiqsâ, III, 117.

15.al-Tijânî, op. cit., 136-7.

16.Ibid., 14.

17.Ibid., 350-54.

18.Ibid. 355.

19.Ibid., 356.

20.Ibid., 143.

21.Ibid., 358.

22.Ibn Khaldûn, Berberes, II, 222.

23.Ibid., 288-9.

24.al-Tijânî, op. cit., 103. He was a mamluk of the nephew of Saladin, and master of Gabes under Ibn Ghâniya.

25.Ibn Khaldûn, Berberes, II, 301.

26.For a study of the history of the Banu Ghaniya, see Alfred Bel, Les Benou Ghânya: derniers représentants de l'empire almoravide et leur lutte contre l'empire almohade, (Paris: Ernest Leroux, 1903). It covers most of the major events, but without commenting on the discrepancies to be found in the different texts. Moreover, it primarily chronicles the sequence of events. Al-Matwi also includes an overview of these events.

27.Ibn Khaldun, Berberes, 299.

28.Ibid., 311.

29.Ibid., 326.

30.Ibid., 335-74.

31.Ibid., 339-40.

32.Ibid., 313.

33.Ibid., 351.

34.Ibid., 354.

35.Ibid., 369.

36.Brunschvig, "Esquisse d'histoire monétaire Almohado-Hafside," in Etudes d'Islamologie, vol. I, 77.

37.Fatwâ of Ibn Muhriz, Mi'yâr, (1), I, 345.

38.al'Umari, op. cit., 81.

39.Fatwâ of Ibn 'Arafa, Mi'yâr, (1), II, 311.

40.See the discussion in J. Solignac, "Travaux hydrauliques Hafsides de Tunis," Revue africaine, 79 (1936),517-80.

41.Ibid., 521.

42.Ibid., 544.

43.Ibn Khaldun, Berberes, 350.

44.Fatwa Ibn Muhriz, Mi'yâr, (1), I, 343.

45.Mi'yâr, (1) V., 59.

46.Abî 'Abd Allâh Muḥammad bin Muḥammad al-'Abdarî, Riḥla, edited by Muḥammad al-Fâsî, (Rabat, 1968). The Riḥla starts being recorded by the author when he reaches Tlemcen.

47.Ibid., 9-10.

48.Ibid., 11.

49.Ibid., 31.

50.Ibid., 32.

51.Ibid., 32.

52.Ibid., 37-8.

53.Fatwâ of al-Ghubrînî, Mi'yâr, (1), I, 118.

54.al-'Abdarî, 36.

55.Ibid., 38.

56.Ibid., 39-40.

57.Ibid., 39-40.

58.Ibid., 84.

59.Tijânî, 4.

60.Ibid., 13.

61.Ibid., 13.

62.Ibid., 14.

63.Adorne, 22.

64.Ibid., 223.

65.Ibid., 224.

66.al-Tijânî, 25.

67.Ibid., 27.

68.Ibid., 86-7.

69.Ibid., 110.

70.Ibid., 179.

71.Ibid., 119.

72.Ibid., 180-4.

73.Ibid., 184.

74.Ibid., 192-2.

75.al-ʿUmarî, op. cit., 88.

76.Fatwa of Ibn ʿArafa, Miʿyâr, (1), I, 16.

77.Fatwâ Ibn ʿArafa, Miʿyâr, I, 18.

78.Fatwâ Ibn ʿArafa, Miʿyâr, I, 18.

79.Fatwâ Ibn ʿArafa, Miʿyâr, (1), II, 338-9.

80.See Ch. Dufourcq, L'Espagne Catalane et le Maghrib aux et XVe siecles, 591-3.

81.Umarî, op. cit., 82-3.

82.Ibid., 84.

83.Leo Africanus, II, 389.

84.Ibid., II, 398.

85.Ibid., II, 394.

86.Miʿyâr, (1) VII, 34-5

87.Ibn ʿArafa, Miʿyâr, VII, (1), 36.

88.Fatwâ of Ibn Ghammaz, Miʿyâr, (1), IX, 4.

89.Fatwâ of Ibn ʿAbd al-Rafiʿ, (1), IX, 3.

90.Ibid., (1), VIII, 281.

91.Miʿyâr, (1), VII, 129-30.

92. Fatwâ Ibn ʿArafa, Miʿyâr, (1), IX, 56.

93. Ibid.

94. al-ʿAbdarî, 41.

95. Ibn Battûta, Voyages de l'Afrique du Nord à la Mecque, trad. C. Defremery and B. R. Sanguinetti (1858), new edition (Paris, François Maspero, 1982) vol.1, 89.

96. See chapter four for references. Also, M. Talbi, "The Spread of Civilization in the Maghrib and its Impact on Western Civilization," General History of Africa, IV: Africa From the Twelfth to the Sixteenth Century, edited by D.T. Niane, (Unesco, 1984), 66.

CONCLUSION

Decadence, decline, and decay are three words that have been repeated again and again by historians writing about the Hafsid period. Despite the difficulties faced by the Hafsids, and their not always successful attempts to counteract them, it would be more accurate to describe the period as one of restructuring the economy, and, to some extent, society as a whole. This reorganization took place in an environment of change throughout the Mediterranean, as Christian Europe began to shed its feudal economic and social system, and the Islamic world fragmented into a multiplicity of smaller states. Thus, both internally and externally the Hafsid state inherited a set of circumstances very different from its predecessors.

The Hafsid period marked the end of a long pattern of economic development in Ifrîqîya which had been dominated by the production of agricultural surpluses for sale on regional and long-distance markets. Olive oil, wheat, barley, dates, and other agricultural products had been produced in such quantities that the Romans and early

Islamic states had been able to supply much of the Mediterranean basin with food items, while still being able to feed the people of Ifrîqîya. This trade also included a variety of pastoral and artisan products for which Ifrîqîya had become well known by the medieval period such as leather, hides, wool, and pottery. Saharan trade, primarily in gold and slaves, had also been an important source of wealth for rulers, and merchants. This trade contributed to the wealth of the Aghlabids, Fatimids, and Zirids. Both the agricultural sector, and the overland trade across the Sahara were encouraged and protected under the Aghlabids, Fatimids and Zirids. It is these two sectors which made them wealthy and contributed to the renown of such cities as Qayrawân, Mahdîya, and Gabes.

Overseas trade in the Mediterranean provided the markets for these goods. Under the Romans and Byzantines, the sea was traversed by their ships, with goods produced in Ifrîqîya. Thus, the control of production and the markets were under the wing of the same government. The Aghlabids, Fatimids and Zirids attempted to do this as well. Ifrîqîyan crops, and crafts, and slaves and gold from the Sahara were traded abroad in markets controlled by Islamic imperial rule. Spices, fabrics, dyes, medicinal herbs, metals, fabrics, and weapons passed easily from Egypt to Tunis and the Maghrib, without ever stopping in

a Christian port. The early Islamic rulers also controlled shipping by using imperial ships to transport slaves, wheat, oil, gold and other strategic or valuable goods.

However, by the Hafsid period, two sectors of the economy had already escaped management by the state: agriculture, and Saharan and Mediterranean trade. Agriculture, disrupted by the events of the twelfth century, had already fallen into a decline before the Hafsids came to power. However, rather than rebuilding irrigation systems, and encouraging cultivation, land was taken away from its owners or occupants and given to Arab tribes or Almohad shaykhs. The Arabs especially were resented by the populace. Of course, some of the Arab tribes and Almohad shaykhs given land continued to have it cultivated, but it no longer produced large surpluses. The decline in production, even at a time when the population had been reduced by war and disease, was insufficient for the needs of the people. Famines were common in the thirteenth and fourteenth centuries. The Hafsid government had to resort to purchasing oil, wheat and other grains from the Crown of Aragon, Sicily, and Naples. Italian and Aragonese oil was shipped to Ifrîqîya in the thirteenth century. In the thirteenth century, Frederick II of Sicily sent grain to Tunis.[1] In fact, at times it was forbidden to export wheat from Hafsid territories, as al-Tijânî mentioned at the time of his visit to Tripoli in 1307.[2]

This, of course, was the same year that famine hit Tripolitania to such an extent that al-Tijânî reported the tale of selling dead bodies. When Ifrîqîya was hit by the plague, not just in the 1340's, but also earlier, the population, already weakened by famines, was further reduced by at least 25 percent. Accounts of the Black Death in Tunis referred to 1,000 bodies a day being buried there. Thus, the countryside was described by contemporary witnesses as depopulated, without the hectares of grain, and rows of olive trees prevalent in the past. The Sahil was no longer described as a fertile region. Even the date palms of Gafsa and Tozeur had been partially destroyed by the warfare of the thirteenth century.

This change in the agricultural sector of the economy was part of a progressive fragmentation of Ifrîqîya into autarchic units. Each region began to act autonomously as local Berber or Arab tribes asserted their independence from the central government, which really had very little direct control over the interior and south. This pattern in fact, was contributed to by the Hafsid need for Arabs tribes, especially the Banû Sulaym, to collect taxes in the interior, and serve in the military. They were unable to re-establish the old imperial schemes of the early Islamic states and to unite Ifrîqîya under their rule.

Ifrîqîya was also hit by changing patterns of trade in the Mediterranean and the Sahara. Saharan trade had

already been drawn west by the Murâbiṭûn and Muwahhidûn; however, this continued during the Hafsid period. And, despite a brief interlude when they controlled Tlemcen and Sijilmâsa, they were unsuccessful in capturing the major caravan routes. The Saharan routes coming from Kawâr through Zawîla, and through Wargla and Waddân were temporarily controlled by the Banû Ghâniya at the turn of the thirteenth century. Southern Ifrîqîya between Gabes and Tripoli was also unsafe for travellers, who were often attacked by the Khawârij in the region. The Saharan routes which ended at Tlemcen and Bijâya, both of which fell under Hafsid control for a time, were also unsafe for caravans. Al-ʿAbdarî mentioned at the end of the thirteenth century how his caravan had to take a detour in an attempt to miss the marauding Arabs on the routes outside Tlemcen. Killing a bandit was even considered meritorius at the time. The Hafsids were still able to acquire some black slaves, but they used white Christians as well. And the constant monetary problems of the thirteenth and fourteenth centuries seem to indicate a lack of gold for coinage. This scenario may have changed by the fifteenth century, with gold being exported in ingots to Italy.[3]

Mediterranean trade fell into the hands of the Crown of Aragon, the Italian city states, Montpellier, and other towns in the northern Mediterranean. The Hafsids, unlike

their predecessors in the eleventh century and earlier, did not have much control over markets or transport. Most goods were shipped on Italian, French, or Catalan ships; whereas before, they had been transported on Muslim ships. Few North African merchants were represented in the ports along the northern Mediterranean. Ifrîqîya had always been an important stop for transit trade, with the spices, perfumes, and luxury goods of the east passing by its gates. However, it was also an exporter of agricultural products. During the Hafsid period, this pattern changed. The Hafsid state became a middleman, rather than a producer. Thus, they resorted to diplomacy, and perhaps piracy, to ensure a share in the Mediterranean market. This dependent status was progressively more unstable as European powers attempted to intercept Saharan trade in the fifteenth century by way of the Atlantic coast.

However, there are some indications of different patterns of long-distance trade in the sorts of products which were shipped out of Hafsid ports. In the tenth and eleventh century, silks, fabrics, leather, dried fruits, olive oil, wheat, slaves, and gold were major items of Ifrîqîyan trade. By the thirteenth century the list is somewhat different. Salt, alum, lead, spices and fabrics departed from Tunis, Bijâya, and Tripoli. Salt was produced at sites within Ifrîqîya, such as the salines or sibkhas near Tozeur, and south of Constantine in the Zab.

Alum, an important item for fixing dyes, and lead, were also mined in the mountains of Ifrîqîya. Fabrics were woven in both villages and urban centers of the one product which still was produced in quantity - wool. And spices were part of a transport trade from the east. However, only the highest quality oil was exported, and in exchange the Hafsids imported an inferior quality olive oil.

European merchants came to Tunis for many reasons. It was a natural stopping point for ships in the Mediterranean, and it was close to Sicily. However, it was also a place to pick up items to feed the growing market in luxuries: spices, perfumes, fabrics, and leather. The Catalans, especially, wanted to control trade in the western Mediterranean and cut out the Genoese and other Italian city states. It is possible that these states also envisioned infiltrating and controlling the Saharan routes, as the Portuguese and Spanish later did in the far Maghrib. However, the Hafsids did not really have control over this trade themselves, despite their spending on luxuries and palaces which suggests they did.

The Hafsids faced impossible circumstances when they came to power. The traditional economic base was in disarray, the Saharan routes were uncertain, and Mediterranean trade was monopolized by Christians. Ifrîqîya had become divided into more isolated and

independent communities. However, they did little to rectify this other than to organize a bureaucracy to extract taxes, give favorites positions, and to display their power. They became a military city state, controlling the area around Tunis, and ruling through the Arab tribes in the interior. While people were starving, the Hafsid rulers were building pleasure gardens and going on campaign. They farmed out the tax collecting to their supporters, and executed those who disagreed. They also played off the different factions within the power structure: Almohads, Andalusi immigrants, and Arabs by giving them positions and land. But, despite these problems, Tunis continued to be an entrepot of trade and a center for scholars and Sufi's from all over the Maghrib, primarily because it was a neccesary stop for those on the ḥajj from the west, and those sailing across the Mediterranean. Everything stopped somewhere in Hafsid territory.

The study of the patterns in the economy of Ifriqiya over a long time span has made it possible to see some of the important issues in the history of Ifrîqîya and its economy. It has provided a context within which to understand the problems of the Hafsids in the thirteenth and fourteenth century. However, this scenario raises many questions which need to be studied in the future. One of these problems is the confusion of the sixteenth century

at the end of Hafsid rule, a period not covered in Brunschvig's major work on the Hafsids. How did they fit into the scenario of growing European power in the the region? A further study of the development of commercial law under the Hafsids should also be done, using the numerous collections of fatwâs as a point of departure. And finally, the question of Saharan trade for the Hafsid period still poses the difficulty of too few references in the sources examined to date.

1.See Brunschvig, Hafsides, II, 257. Also, it is important to note that on several occassions where he mentions Hafsid food exports, he is referring to the account of al-Idrisi, who died long before the first Hafsid came to power. See, II, 254, note 3.

2.al-Tijânî, 251-2.

3.Brunschvig, II, 263. He cites Mas Latrie, 222.

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